ARCHITECTVRE
THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. XL NOVEMBER, 1919 NO. 5

The Butler Art Institute, Youngstown, Ohio

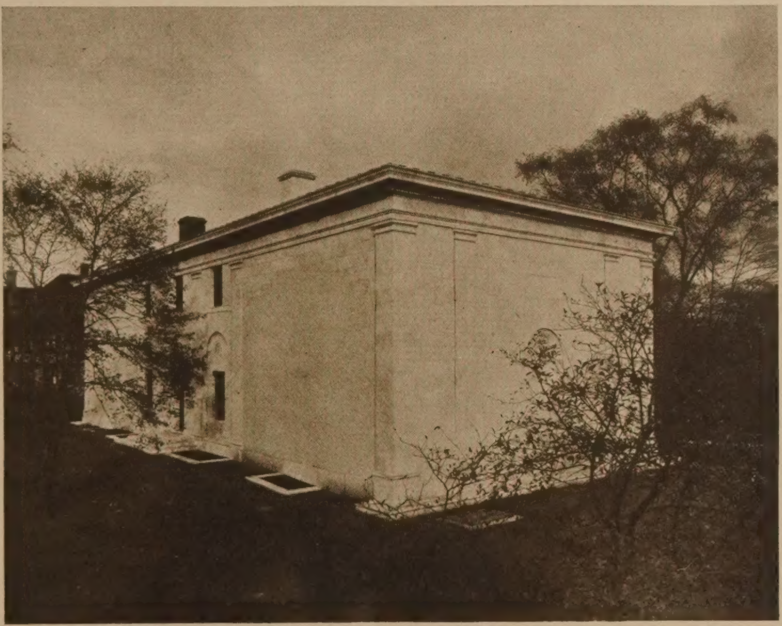
"Pro Bono Publico"

McKim, Mead & White, Architects

THIS beautiful temple of art is the gift of Mr. Joseph G. Butler, Jr., to the city of Youngstown, Ohio.

The building was formally dedicated to the public on October 16, and its opening was marked by an exhibition of Mr. Butler's notable private collection of modern American paintings.

The building is designed in the style of the early Italian Renaissance, and the exterior is of white Georgia marble. It is placed on an imposing site at quite an elevation above the street level, and is surrounded with spacious lawns and appropriate planting. The design is restful, its quiet dignity fulfils the purpose of serious thought and repose in the contemplation of works of art. The main façade gives the impression of a single story, the high-arched portico being the central feature. This portico is vaulted in colored terra-cotta, presenting a sky-blue field with cross ribs of cream. At the intersection of the lateral vaults are inserted portrait heads of two celebrated patrons of the arts during the Italian Renaissance. These are reproduced from medals in the collection of the National Museum in Florence, and represent the heads of Cardinal Giuliano Della Rovers (later Pope Julius the Second), patron of Michael Angelo and Raphael, and of Cosmos Dei Medici, patron of Brunelleschi and Michelozzo. From the central vault hangs an ornamental bronze lantern.



Rear of the Butler Art Institute.

Sculptured statues of Apollo and Minerva, by J. Massey Rhind, are placed in the niches at either side of the entrance.

The writer recalls the striking beauty of the building in the evening, the effective lighting of the portico, the rich blue tile of the ceiling in contrast with the marble and bronze, and the dark copper roof.

The central hall, directly behind the portico, is intended for sculpture, tapestries, and works of art other than paintings, although it is hung temporarily with some large canvases. The walls are of caen stone. The wooden-beamed ceiling is decorated in color in the Italian style. There is a black granite tile border around a mosaic floor, which is laid in Touraine granite with the colored parts in Hispanic glazes and Tuscan inlay decoration.

From the back of the central hall runs a minor hall. Here is the staircase to the second-story gallery. The rear door of this hall leads out to the open court, which is to be developed as a formal Italian garden with fountains, terraces, and a loggia at the extreme end. The designs for the original building show wings for future galleries which will flank the north and south sides of this garden.

The two principal galleries for paintings are entered from the central hall. They are identical in size and treatment, being thirty-four feet six inches wide, forty-three feet four and one-half inches long, and twenty-eight feet high. The black marble doorways indicate entrances to the proposed new wings, which are to be connected with the main building.

The galleries are covered with skylights. Between the skylight and the glass ceiling lights there has been installed a special system for day lighting, known as ventilighter. The daylight is filtered through movable silk vanes in such manner as to avoid the casting of shadows at any time and still provide the exact degree of light desired. The system is controlled and operated from a pocket set flush with, and opening from, the baseboard of the room.

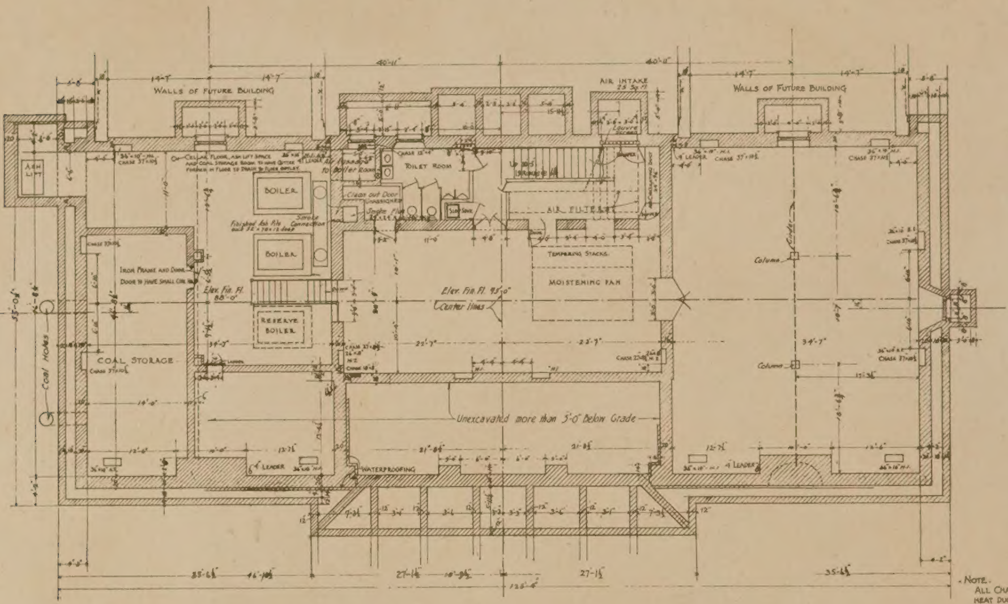
It is truly gratifying to witness Mr. Butler's keen interest in every detail of the building and his broad-minded policy with the architects in obtaining nothing less than perfection in providing a suitable art centre for the community and housing for valuable works of art. In a disastrous fire in his home a few years ago many choice paintings of his original collection were lost, but he has been gradually adding new purchases in anticipation of the completion of the Art Institute, with the hope of sharing in the enjoyment of them with his fellow-townsmen.

Some of the artists have foreign names, but the subjects are American and the work was executed in this country.

It is expected that other collections will be brought to the Institute from time to time, but no outside exhibits will be given space until after the completion of the entire building.

Mr. Butler's devotion to the interests of our American school, his patronage of contemporary American painters, and his willingness to recognize true values without awaiting the verdict of the dealers, will all help to stimulate higher accomplishment.

There is an enormous lifting power in Mr. Butler's attitude toward modern American art. It requires daring and sometimes is subject to errors of judgment, but on the whole it gives strength and impetus to the spread of culture and is an inspiration for higher standards of community life.



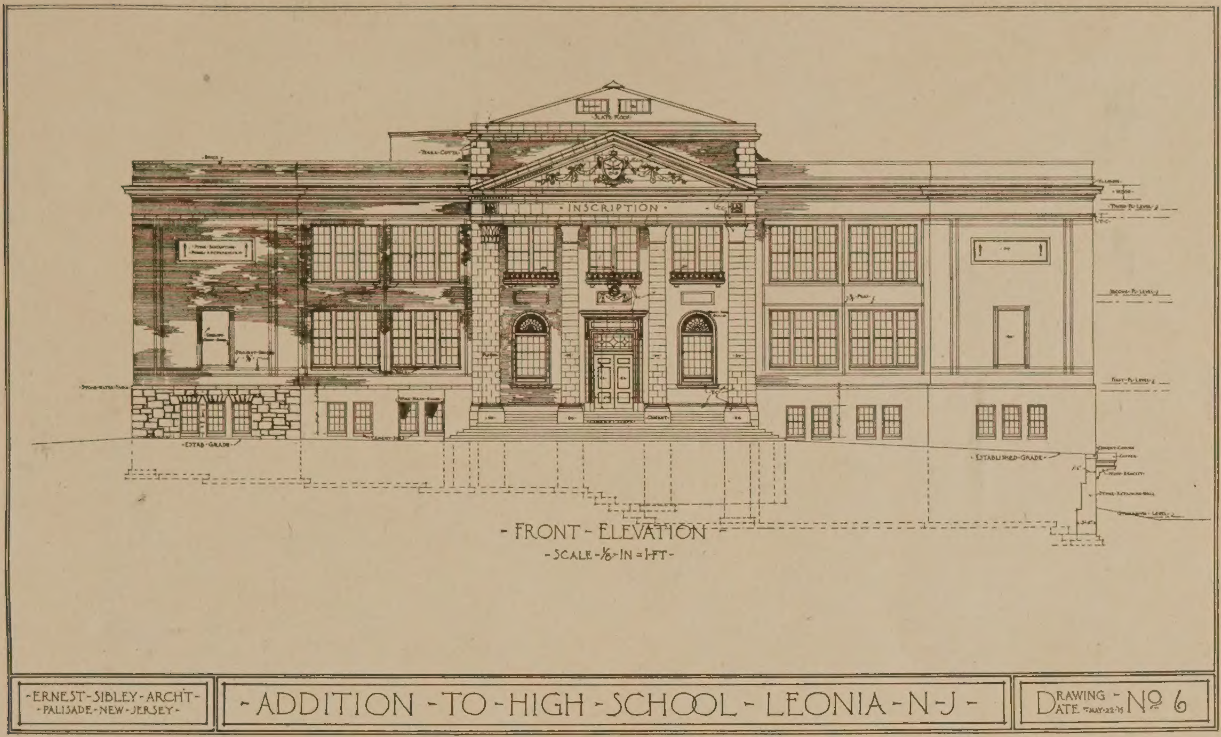
BASEMENT · PLAN

NOTE.
ALL CHASES IN BRICKWORK FOR STEAM PIPES AND HEAT DUCTS BEGIN 20" BELOW FLOOR CONSTRUCTION.

FOR START OF CHASES FOR PLUMBING PIPES SEE PLUMBING DRAWINGS.

The following is a complete list of the paintings shown at the Inaugural Exhibition of the Butler Art Institute:

"A Golden Sunset," W. C. Fitler; "A Forest Cathedral," Pieter Van Veen; "Roadside Meeting," Albert P. Tyder; "Jolly Sailors," Edwin A. Abbey; "Lands End—Cornwall," W. T. Richards; "Old Fisherman," Gerritt A. Beneker; "Portrait of Mr. Sharp," Frank Duveneck; "Bridge at Cos Cob," Birge Harrison; "Landscape," Wm. H. Keith; "The Ballet Girl," Louis Kornberg; "An Old Farm," J. Francis Murphy; "A Path Down the Mountains," Chauncey F. Ryder; "Midnight Silence," H. M. Kitchell; "Moonlit Lake," R. A. Blakelock; "The Sonata," Irving R. Wiles; "Red and Gold," Frank W. Benson; "The Silver Moonlight," Jos. H. Boston; "Portrait of My Daughter," Wm. M. Chase; "Snap the Whip," Winslow Homer; "Silvan Stream," John F. Carlson; "Devotion," Wm. M. Chase; "Long Pond," Henry W. Ranger; "Portrait," Gilbert Stuart; "Still Life—Fish," Henry R. Rittenberg; "Sylvia," Wm. Paxton; "Breakers at Floodtide," Frederick J. Waugh; "Sidonie," Edmund Greacen; "Fiesta Day," Victor Higgins; "White and Pure Gold," E. Z. Ipson; "Sicilian Bandit," H. L. Hilderbrandt; "From Hill to Hill," Ben Foster; "Pandora," Mary L. Macomber; "Summer Morning," Leonard Ochtman; "Gold and Old Lace," George Fuller; "Turtle Rock," Pieter Van Veen; "Winter Sunlight," Chas. Rosen; "Mountain Stream," Cullen Yates; "Springtime," Ivan G. Olinsky; "St. Michael's Church," Birge Harrison; "Call of the West Wind," Chas. H. Davis; "Emerald Robe," R. H. Nesbit; "Vermont Woods in Winter," H. F. Waltman; "Silence and Evening List," Gardner Symons; "Silvery Waters," Frank De Haven; "By Drover's Inn," G. Glenn Newell; "An October Day," Pieter Van Veen; "Monarch of All He Surveys," G. Glenn Newell; "The Lady in Blue," Edmund Greacen; "Making Medicine," Irving E. Couse; "A Vision of the Past," Irving E. Couse; "Water Shrine," Irving E. Couse; "Evening Glow," Wm. H. Keith; "The Fortune Teller," F. Luis Mora; "Where Soldiers Sleep and Poppies Grow," Robert Vonnoh; "The Unconquered," G. Glenn Newell; "Twilight," R. A. Blakelock; "Autumn Evening," D. W. Tryon; "Landscape-Summer," Elliott Daingerfield; "West Glow," Elliott Daingerfield; "Tragedy at Sea," Geo. Inness; "Portrait of H. H. Stambaugh," Ivan G. Olinsky; "Kwaunon," John La Farge; "Fairy Tales," Ivan G. Olinsky; "Fairy Stories," Ivan G. Olinsky; "Still Life," Edmund Tarbell; "Portrait of Mrs. Gilbert," Irving R. Wiles; "San Francisco Harbor," N. Hagerup; "Portrait of a Lady," Frank Duveneck; "Marine," Emil Carlsen.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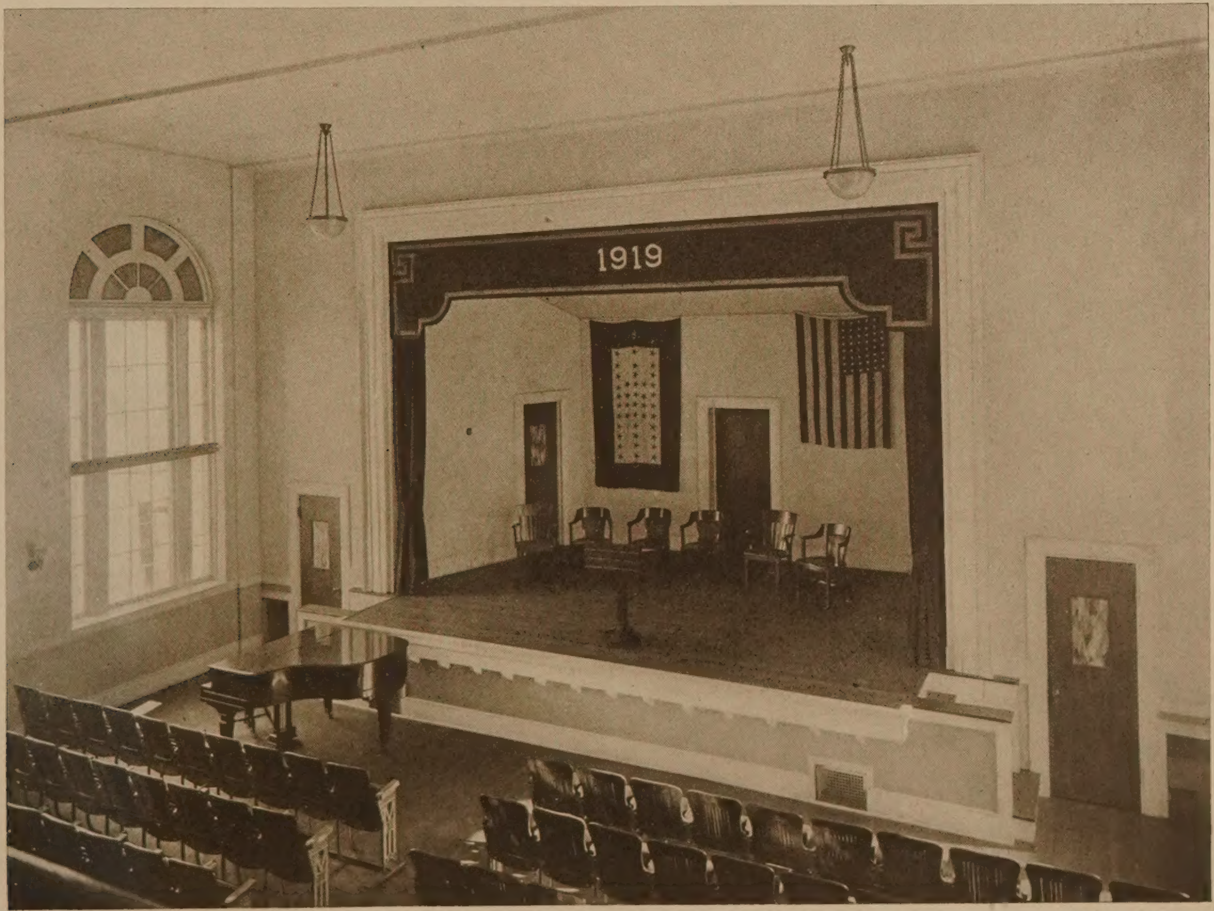
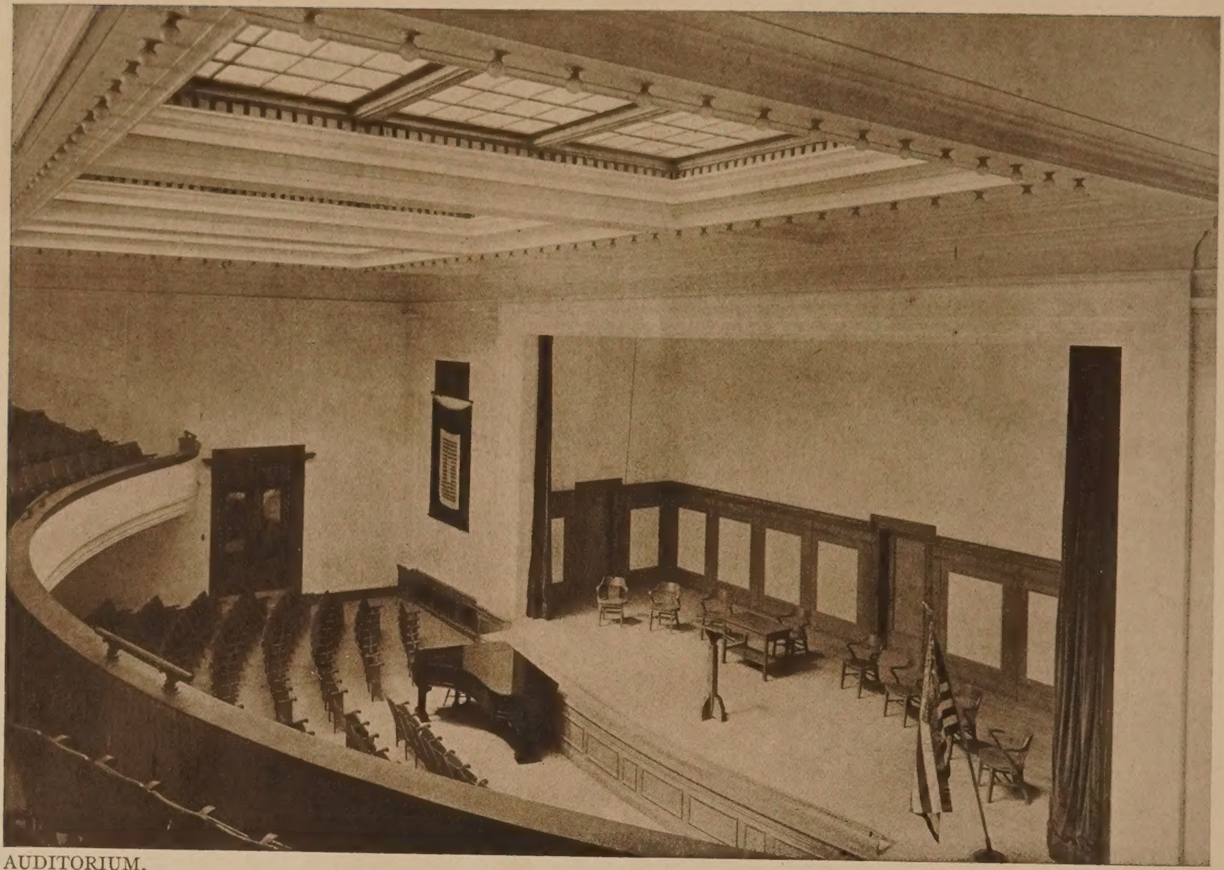
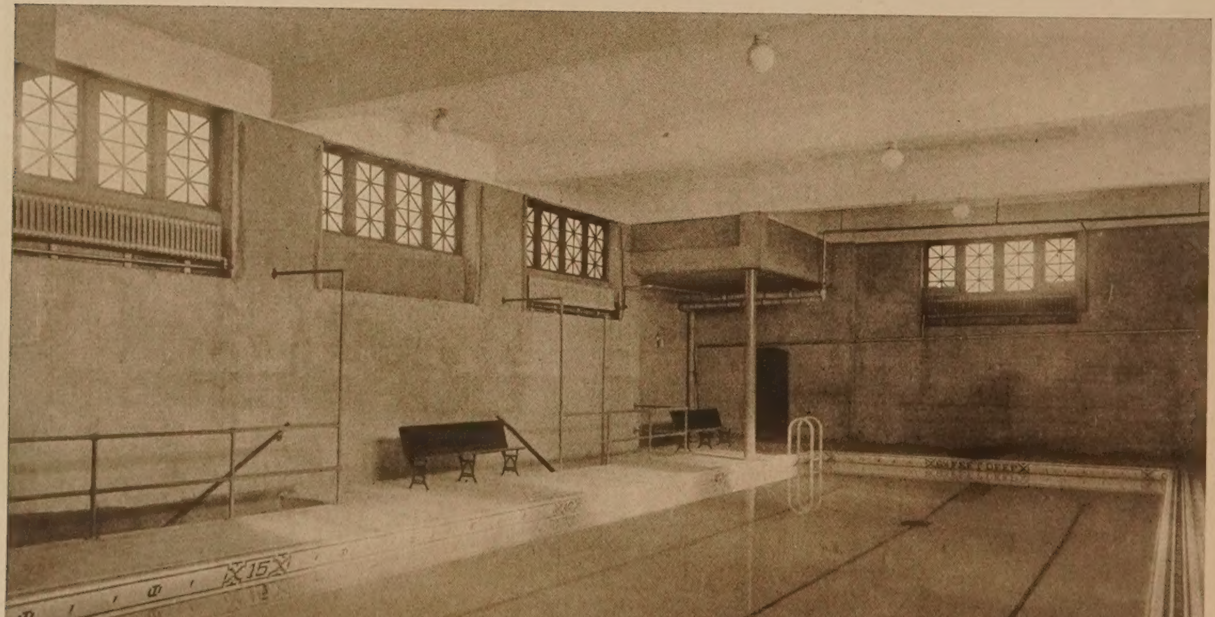
- SCALE - 1/8 - IN = 1 - FT -
- ERNEST - SIBLEY - ARCH'T -
- PALISADE - NEW - JERSEY -
- ADDITION - TO - HIGH - SCHOOL - LEONIA - N - J -
DRAWING - DATE - MAY - 22 - 15 - Nº 6



AUDITORIUM, HIGH SCHOOL, LEONIA, N. J. Ernest Sibley, Architect.



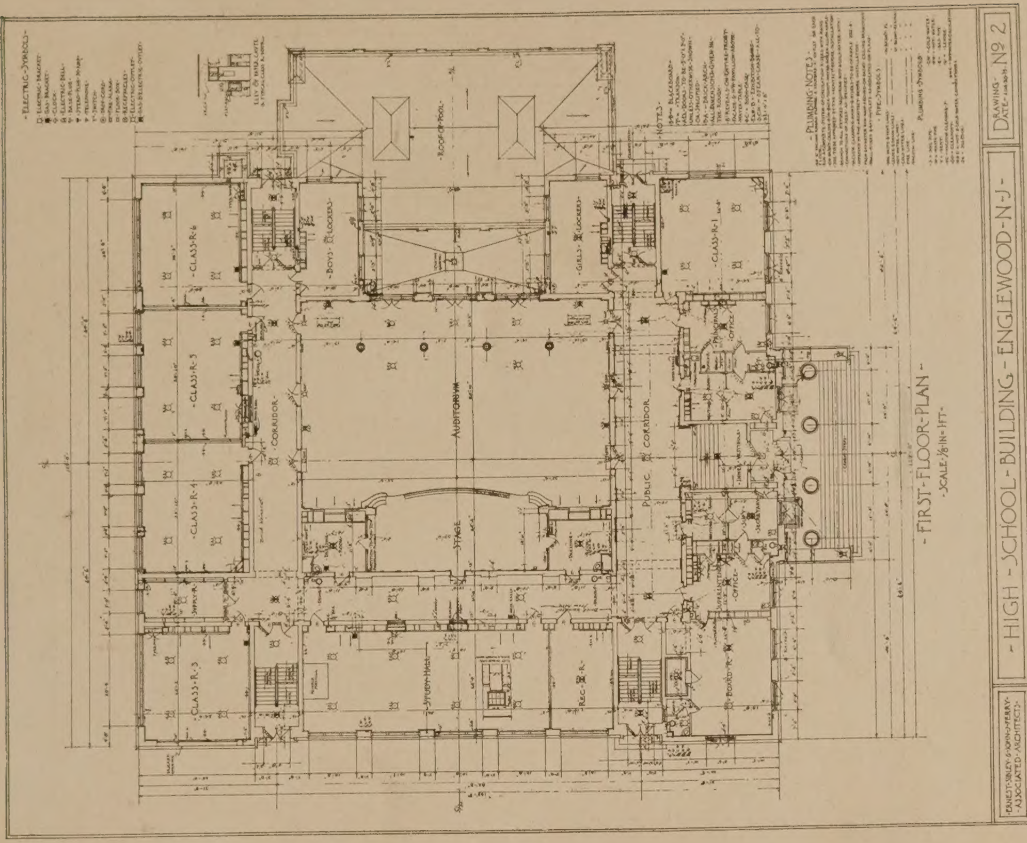
AUDITORIUM.



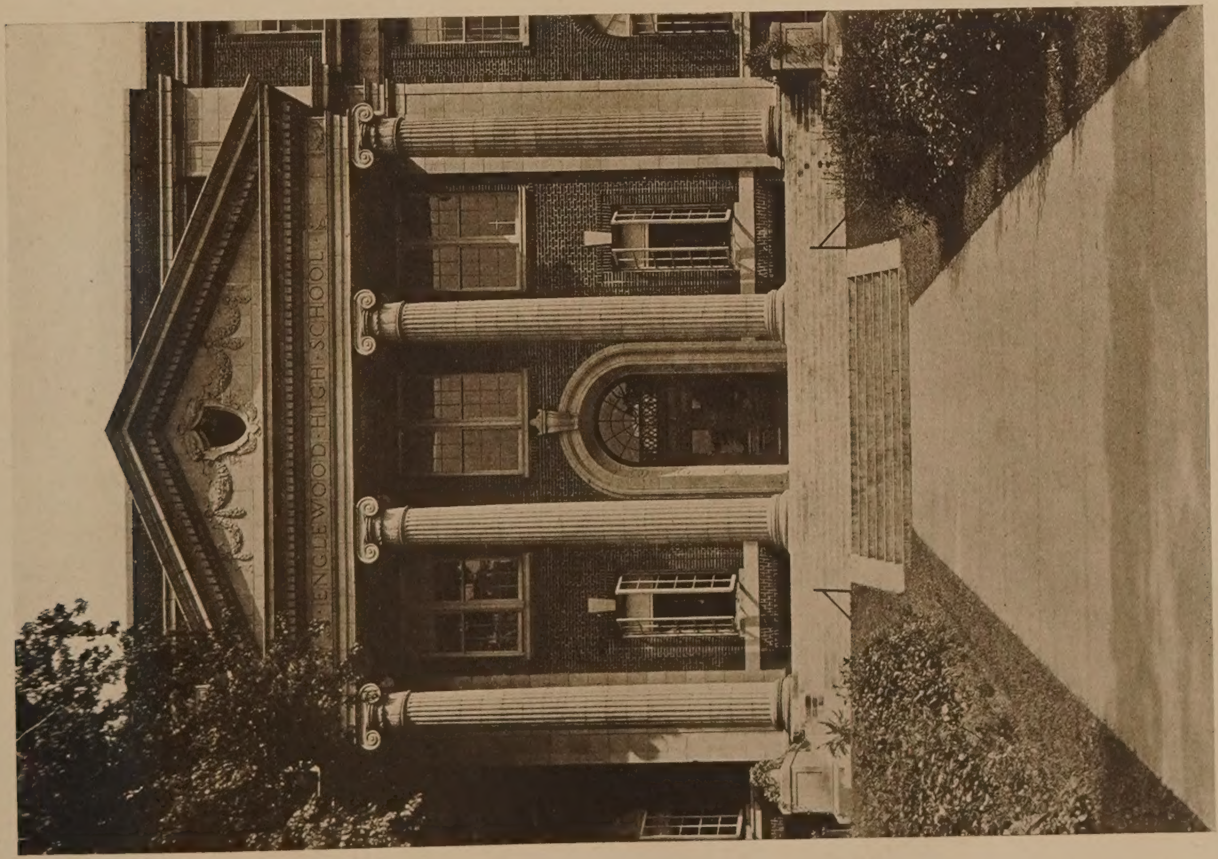
SWIMMING-POOL.

Ernest Sibley and John J. Ferry, Associated Architects.

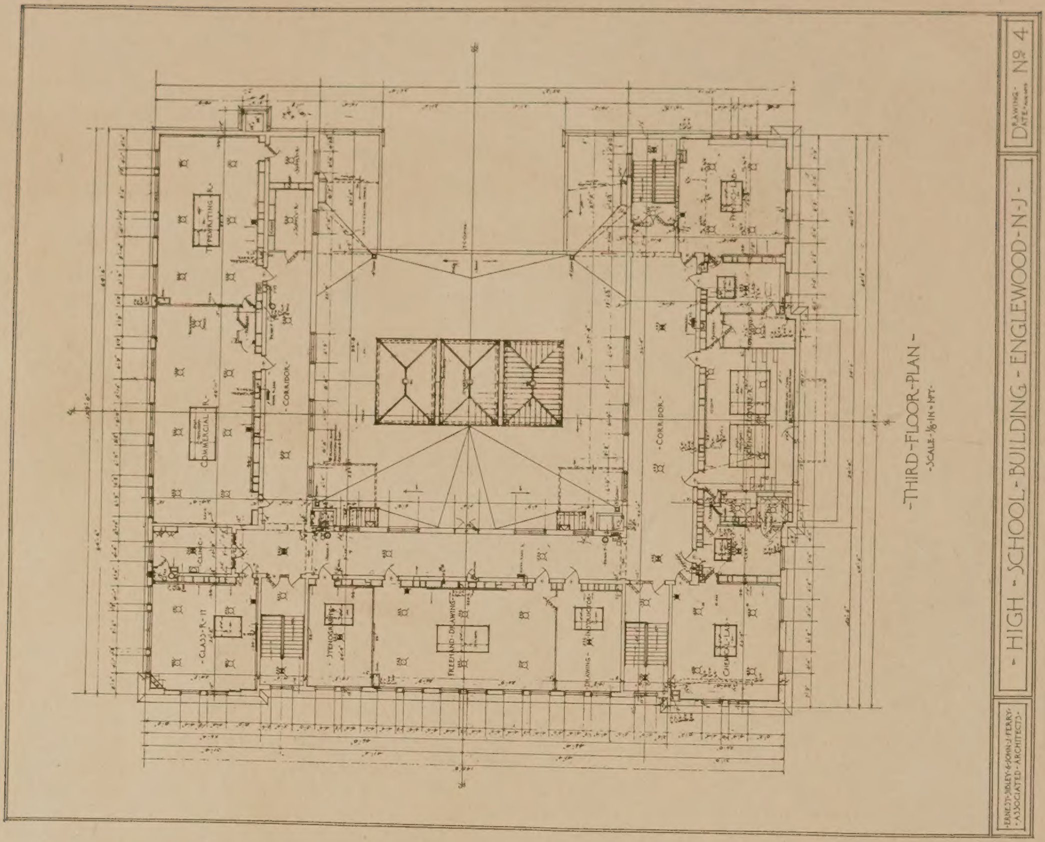
HIGH SCHOOL, ENGLEWOOD, N. J.



Ernest Sibley and John J. Ferry, Associated Architects.



MAIN ENTRANCE, HIGH SCHOOL, ENGLEWOOD, N. J.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-SCALE-⅛-IN-1-FT-
-TYPEWRITING-R-
-COMMERCIAL-R-
-CORRIDOR-
-CLASS-R-11-
-STENOGRAPHY-
-FREEHAND-DRAWING-
-CHEMICAL-LAB-
-ERNEST-SIBLEY-&-JOHN-J-FERRY-
-ASSOCIATED-ARCHITECTS-
-HIGH-SCHOOL-BUILDING-ENGLEWOOD-N-J-
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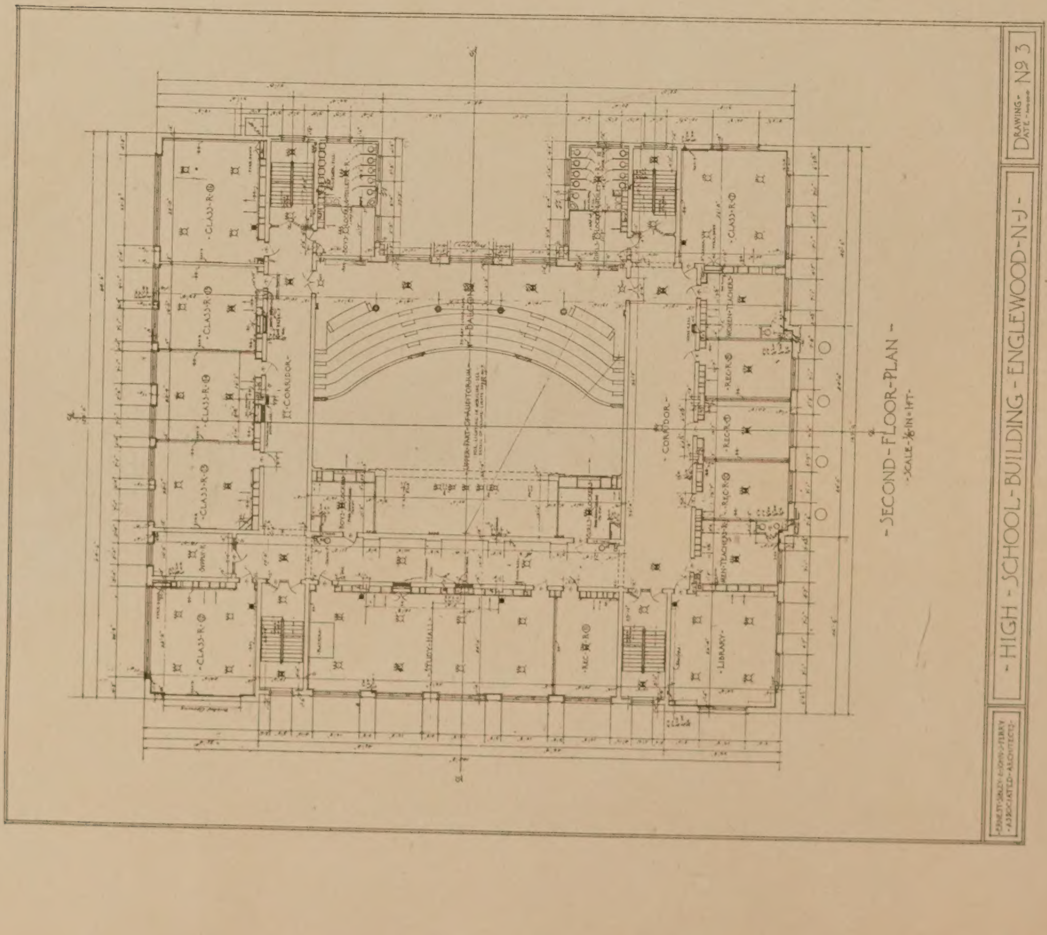
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-SCALE-⅛-IN-1-FT-
-CLASS-R-
-CORRIDOR-
-BALCONY-
-UPPER-PART-OF-AUDITORIUM-
-STUDY-HALL-
-REC-R-
-LIBRARY-
-WOMEN-TEACHERS-
-MEN-TEACHERS-
-ERNEST-SIBLEY-&-JOHN-J-FERRY-
-ASSOCIATED-ARCHITECTS-
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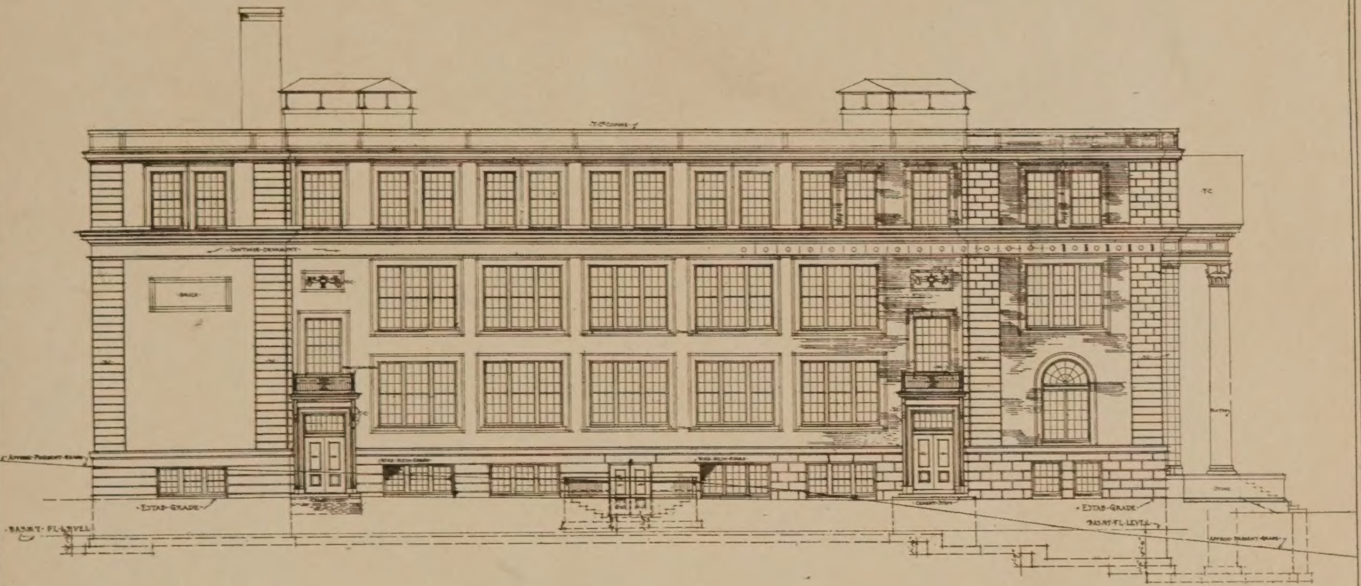

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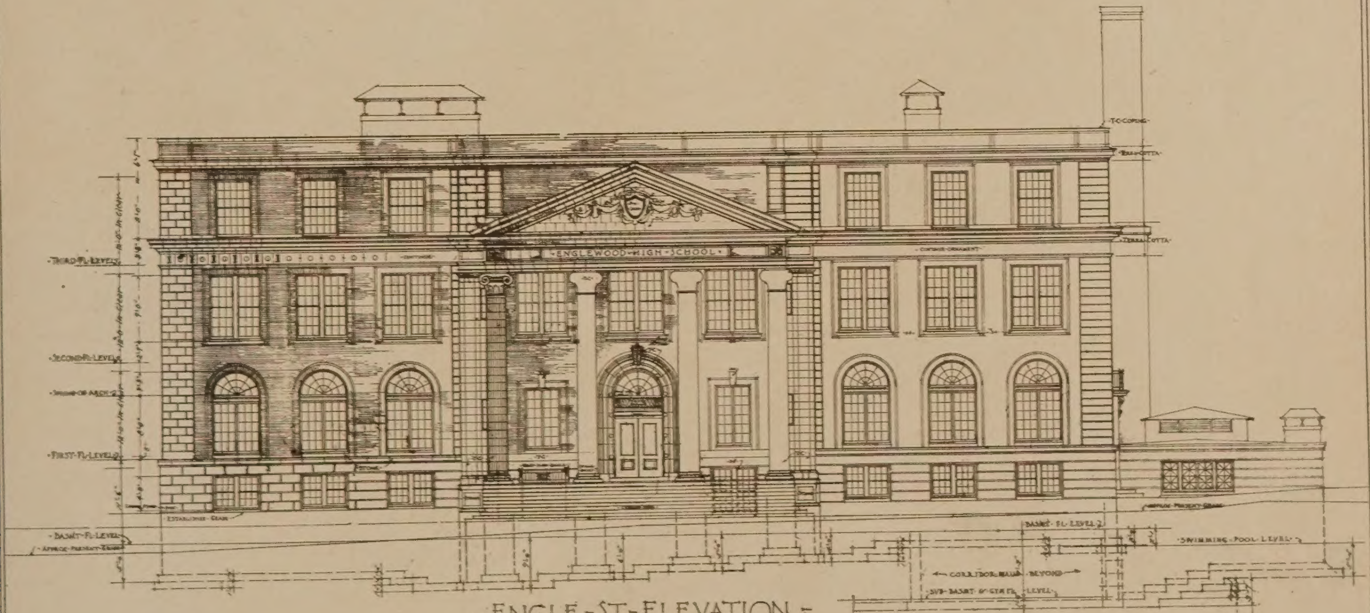

- ENGLE - ST - ELEVATION -
- SCALE - 1/8 IN = 1 FT -

- ERNEST - SIBLEY - & - JOHN - J - FERRY -
- ASSOCIATED - ARCHITECTS -

- HIGH - SCHOOL - BUILDING - ENGLEWOOD - N - J -

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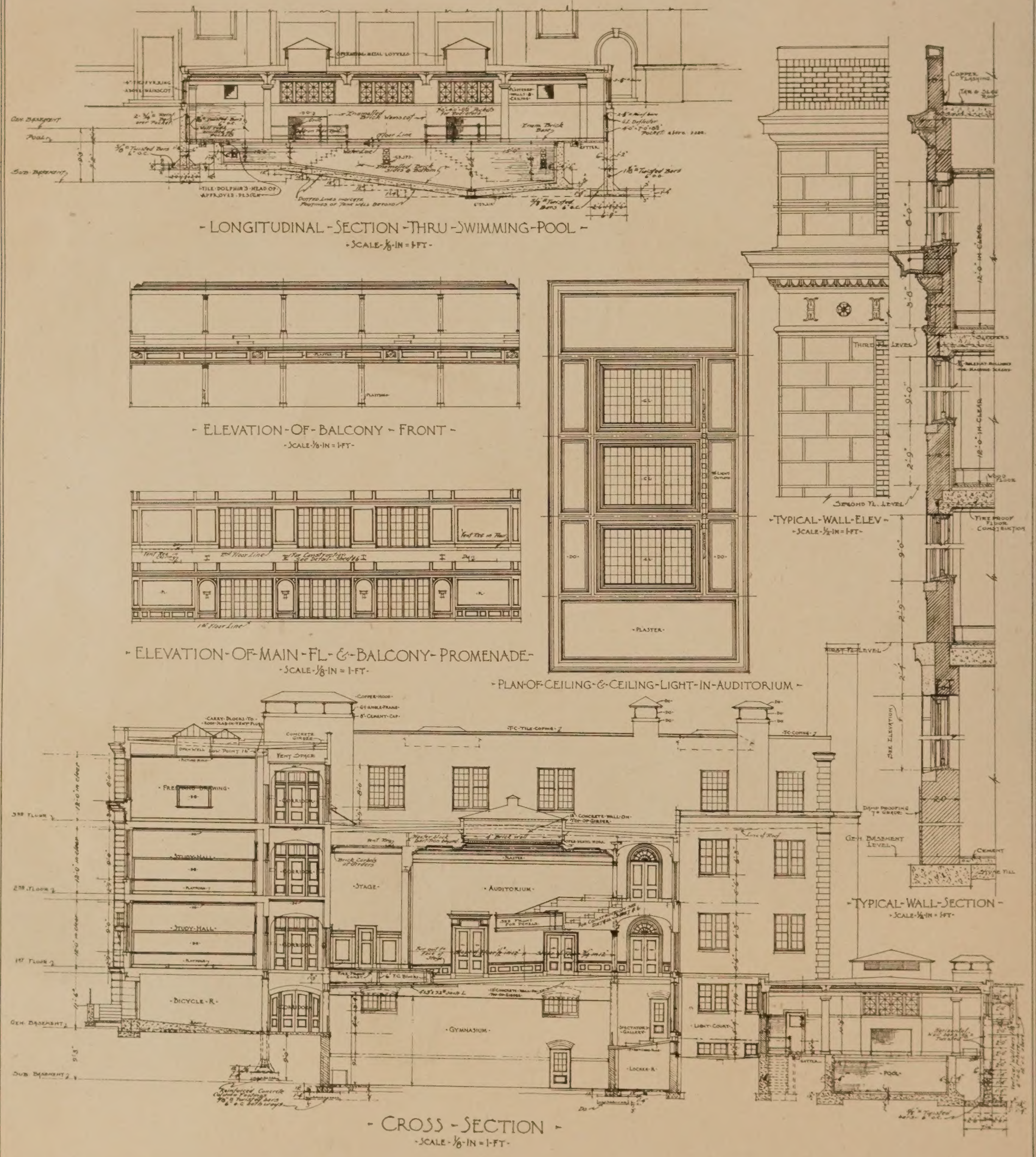


-LONGITUDINAL-SECTION-THRU-SWIMMING-POOL-
-SCALE-1/8-IN = 1-FT-

-ELEVATION-OF-BALCONY-FRONT-
-SCALE-1/8-IN = 1-FT-

-ELEVATION-OF-MAIN-FL-&-BALCONY-PROMENADE-
-SCALE-1/8-IN = 1-FT-

-PLAN-OF-CEILING-&-CEILING-LIGHT-IN-AUDITORIUM-

-TYPICAL-WALL-ELEV-
-SCALE-1/2-IN = 1-FT-

-TYPICAL-WALL-SECTION-
-SCALE-1/2-IN = 1-FT-

-CROSS-SECTION-
-SCALE-1/8-IN = 1-FT-

-ERNEST-SIBLEY-&-JOHN-J-FERRY-
-ASSOCIATED-ARCHITECTS-

-HIGH-SCHOOL-BUILDING-ENGLEWOOD-N-J-

DRAWING-DATE-Aug-20/14 No 7

Interpretation of the Classic Orders of Architecture

By David Varon

WHY the study of the classic orders of architecture is set at the head of the artistic part of the study of architecture is something the average student does not quite understand, and this is why he often complies with his duties in this respect rather perfunctorily.

Yet this study is not only rightly placed but ought to prove fascinating to the student if viewed from the right standpoint.

How should we look at the orders to feel their artistic thrill? Certainly not with the purely intellectual eye sufficient in facing a good piece of engineering, but with our very soul, evoking behind each architectural form the endeavor of one of the finest races on earth on behalf of noble ideals.

Thus, and thus only, can the average student be made to take a deep interest in the study of the orders; and we may also hope to redeem the art of architectural composition which our forefathers possessed almost as an instinct and which was strongly set back by the advent of modern industrialism and commercialism.

We can hardly do any better than to consider the orders in their foremost applications, *i. e.*, the Greek temples. In its simplest definition a temple is nothing but a shrine containing a sacred idol. But here is where the Greek artist was inspired as only great poets can be. For the heretofore ugly representations which were given the Greek myths they substituted the immortal masterpieces of Phidias and his school, which satisfied the popular craving for a concrete representation of their gods in a most uplifting manner. Phidias's Jupiter and Minerva breathed divinity and all the virtues that are fit to inspire youths with noble deeds. There can be no doubt but the sight of them did as much in shaping the morals and the self-control of Greek youths as does in modern time Rude's immortal "Marseillaise" in instilling indomitable courage into modern French youth.

Such achievements could be sheltered only under shrines as worthy of them as the Parthenon and other structures of its kind, breathing the same qualities as the sculptural masterpieces, as far as they could be imparted to brick and stone. The Greek artist, architect, painter, and sculptor were all one, and working for one purpose: the glorification of a god, of an ideal—he was gifted by nature with a very keen analytical mind which enabled him to crown the efforts of preceding generations by finding out in both nature and man the very principles of beauty in its different expressions. In other words, the Greek artist set down the laws of æsthetics which empowered him to create emotions without resorting to symbols, as did the preceding civilizations.

It is such considerations that ought to take hold of us while facing a Greek temple. When the artistic emotion is created and there is genuine enjoyment, then it is time to ask one's self questions about the various orders.

What are they? What do they mean? What signify the words Doric, Ionic, and Corinthian? These words cover quite a ground, and while it is difficult to put the various qualities in common terms, it is possible at least to find some approaching epithets:

DORIC—stern, solid, grave, impressive.

IONIC—grace allied to strength.

CORINTHIAN—majesty, stateliness, and grace.

When these three standard orders were evolved they constituted in a way three primary architectural expressions, even as yellow, blue, and red are the three primary colors.

Like sculpture, which, after a period devoted only to the representations of the gods and all the myths of the time, took interest in man as a common mortal, architecture, too, followed suit in creating edifices of minor importance or rather more human in character. Thus a scale was created with the temples at the top, representative of the highest ideals and the foot the expression of human needs—not excluding beauty. In between figure the combinations of both extremes or the endeavors of material man toward the spiritual.

Thus interpreted, the orders, as we may still see them on some extant edifices, ought to be applied only on such programmes as call for their special qualities of greatness, etc., and never think of applying them on any structure of the commonest character.

But like colors and their combinations, also like the human moods and their expressions, the orders might be put to use in a degree or in combination. The colonial period gives us a delightful illustration of the way in which one may resort to them for a residential programme. Their lightness and the other changes wrought in the classic types is a splendid lesson. Service, truth, and a refined sense of the beautiful contributed these elegant interpretations of the classic examples.

The French Renaissance produced many a masterpiece in which the architect knew exquisitely how to make them fit for humans.

But, furthermore, from the similarity established between our art and sculpture there springs forth a corollary. As the statues of the gods—and for that matter any other famous sculptural work, such as the fighting gladiator—show dignity (or any other such quality proper to the subject) not only on their faces but also in the general attitude of the body, likewise not only the orders—which quite often are merely applied like ornaments—but the masses and outline of the whole structure should bespeak the corresponding character. Thus a very graceful Ionic composition will require not only the presence of the orders—a mere label, as it were—but that the general proportions and silhouette of the plan should as well be in harmony with the principal idea.

That ordinances—which does not necessarily mean orders—are sufficient for producing distinguished effects is illustrated by several splendid examples among which many residential compositions of the latter part of the eighteenth century, namely, the period of Louis XVI. The mere contrasting of rustications with blank surfaces according to certain proportions and a sense of measure proves very effective.

What strength do not the orders, used in their absolute standard form, gain from the self-imposed restriction of the person of taste? Used apropos, their effect is powerful and towers as much above the surroundings as a god or a hero above the common mortals. A sense of discrimination commands that they should not be defiled by being put to use on any programme whatever, no more than certain forms of speech ought to be debased by misusing them, but ought to be seen on structures sheltering objects and purposes high in the esteem of all, in which the idols of strength and beauty gave place to ideals of justice, humanity, and beauty. Purely utilitarian edifices may claim their share of architectural splendor by observing the same laws of æsthetics in other forms, even as the smith in his garb gathers from it and the radiant beauty of his own muscles the character proper to his own personality and to himself only.

The conclusion to the foregoing may be summed up in the following:

A student architect standing before the orders he is supposed to study ought to ask himself some questions: First, how should I look at them so as to admire them fully and enthuse about them? To this the natural reply is: he only will admire and enthuse about the orders who will look at their applications with the eyes of a poet who can see in the advent of the Doric order the revelation of man to himself, his own power of creating and expressing. Self-assurance is written on the Doric order, grandeur in simplicity, qualities understood by man in full possession of his self, conscious of his powers. These temples ought to be seen also with the imagination of artists so many of whom attempted restorations not only in architectural drawings but in paintings showing those edifices in the centre of popular processions when celebrating the rites of a deity, the return of triumphing soldiers, or when invoking the various powers of nature on behalf of some daring enterprise. There we see the columns of the temple and the other features marking forcefully the rhythm of the marching procession, a rhythm bound to bring about quiet in the mind and self-control (the surest way to success). The same monuments ought to be looked upon with an analytical eye comparing them to the works of Egyptians who were inclined to resort always to natural symbols, whether of strength or delicacy, and then the Doric and the other columns will merge out triumphant as the resultant of rationalism allied to æstheticism. It is the recognition of beauty and strength of material allied to gravity.

Second, the student should inquire where he can look for an inspiration so as to understand still better the works of the past, look at the present and the future with confidence, and be able some day to fly on his own wings. The Greek was an artist, but he, too, must look for inspiration. Where could he find it except in nature and man? He saw mountains and valleys, seas and rivers, fauna and flora. His keen sense of observation made him discover the principles of grace alike in the tiny stem supporting the flower as well as on the human being and meandering stream; likewise he discovered other splendid truths, contrasts, and analogies, which he put to use with so much success.

Admiration of nature in all its forms and creations, poetic thoughts and a noble ambition of contributing beauty to the visible world, these were the Greek artist's guides. They should be ours to-day.

Pre-War Prices and Pre-War Wage Scales Are Out of the Question

REDUCTIONS in steel prices, as announced by the Industrial Board of the Department of Commerce, are held to be no more important to the general business situation, especially in the building and construction industries, than are the Board's statements that present wage levels should not be disturbed and pre-war prices are out of the question.

Since January there have been received in the Department of Labor thousands of letters from architects, building contractors, prospective investors in buildings, and from State and municipal authorities, in which it was represented that uncertainty as to prices and wages, rather than the present high level of prices and wages, was the stubborn obstacle to be eliminated before a general revival of building and construction work would be had.

Recently the Information and Education Service, in the Department of Labor, has been putting out the results of investigations by trained economists, in the price and wages fields. The conclusion has been, and in this conclusion so eminent an authority as Professor Irving Fisher, of Yale University, has concurred, that the popular expectation of a re-establishment of pre-war prices is not justified. It was asserted that wages had not advanced in proportion to living costs, and that while minor price changes might be expected in some fields, to use the language of Professor Fisher: "We are on a permanently higher price level and the sooner business men of the country take this view and adjust themselves to it, the sooner will they save themselves and the Nation from the misfortune which will come, if we persist in our present false hope."

Since the steel industry is one which most profited from the demands of the war, it probably can afford to make a greater reduction in present prices than may be expected in other industries. Building and construction authorities are not, therefore, disposed to believe that subsequent price negotiations by the Industrial Board of the Department of Commerce will develop reductions proportionately as marked as those announced for steel. They assert that the Board's statement, "in view of the higher costs developed throughout the world as a result of the war, a return to anything like pre-war prices is regarded as out of the question," is a sound conclusion and timely corroboration of the statements made by the Department of Labor in its campaign to stimulate building and construction work.

Two departments of the government—the Department of Labor and the Department of Commerce—working independently, have arrived at the same conviction, namely, that the country is on a new price level and to delay business projects in the hope that pre-war prices again are to prevail is to jeopardize the business structure of the country.

Editorial and Other Comment

An Unavoidable Delay

WE ask the indulgence of our readers for the delay in the publication of the October and November numbers of ARCHITECTURE, made unavoidable by the strikes in the printing trades, and assure them that the magazine will hereafter be printed as usual on its own presses with a promise of the prompt issue of future numbers. It will continue to maintain the high standard which has been established in the character of its plates and letter-press and in the quality of the work presented.

Making the Architect Known to the Man on the Street

OF the thousands who follow art in one form or another few are chosen, few of the many achieve either distinction or a fair living wage. There is something in the name artist that to the uninitiated connotes a lot of romance, the right to special privileges, a little altar whereon the dear unknowing and too often unsympathetic public may have the privilege of burning incense. To many young men and women art seems an easy way out of any real purposeful and thoroughly organized effort at hard work, a freedom from the irksomeness of fixed habits and continued and ordered application. And these are of the many that clutter up the art highways, take up much space on the walls of various exhibitions, and deny all the traditions of good art since the world began. The analogy between the painter and the architect need not be dwelt on in these pages. The architect is as much a creator of beauty, as much bound by the rules of composition, lines and form, light and shade and mass, as the man who works with brushes. Where the painter appeals to the few, the architect addresses thousands, but to the comparatively few the artist is known both by his work and his name, and his reputation lives or falls by the quality of his production.

There have been many objections made, but if the name of the architect was blazoned on or even put in some modest corner of the structures he builds it might possibly have a salutary effect. It might at least make him pause, take time for second thought. The architect is too often hidden behind and within the walls of his building. If he were made more widely responsible to the public for the lack of good taste or knowledge, maybe we should be saved from some of the things the architects themselves in later times look back upon with horror and wonder how they could ever have been guilty of them. In only a comparatively few instances have our architects impressed their individuality upon their work, as have certain of the painters. It would be invidious to name names, but one might go about our streets very much as he would about a gallery of modern paintings and without much more than a glance make a pretty fair guess as to the architects of some of the outstanding buildings, those that engage the attention, by their evidences of sound training and good taste. A mere jumble of stylistic details, classic orders piled together, "school stuff" to adorn a tower of business may fool the few unthinking passers-by, but the judgments of a man's peers so generously given and so often with *chastening* effect, to put it mildly, are the ones that most of us take seriously.

It seems to us that there is a fine opportunity in the teaching of art in our schools throughout the country to make more of the history and development of architecture in connection with the study of general history. There are examples on every side that could be pointed out to even the elementary pupils that would excite their interests and help spread the gospel of beauty and the converse in daily life. We cannot all of us own a gallery of paintings or even prints, but Architecture, good, bad, and indifferent, and worse, is ever before our eyes.

The Architect's Office as a Post-Graduate School

"OF particular interest to the architect and his progressive education in his profession is the question of using the office as a continuation school. Of using it thoughtfully, intelligently, systematically, not on the principle that men learn by contact, but that they learn through interest. This is well instanced by one member of the Council, who described the arrangement in his own office, where all employees meet in regular discussion of all the work in progress; where questions are asked and reasons given; where one draughtsman explains what he is trying to do, and another is given the opportunity of sharing his experience. Men do not learn by grinding through one particular job, but by this very process of sharing experience, and of feeling a common interest in the whole work. The architect's office possesses opportunities for education which have never been properly mobilized, I would venture to say, without criticism or blame, simply because it is difficult for most men to become successful teachers, even though they be so inclined. But if a convenient method of using the office as a practical training-school—and what ground could be better for the purpose?—could be put generally into effect, there can be little doubt of the value it would have. Never can we get too much emphasis upon the thought that men learn only through aroused interest. Never, also, will it be possible for graduates from architectural schools to dispense with the continuation school of practical experience. The task of the subcommittee on education will be to discover, if it may, how these continuation schools may be made most helpful, all of which means a greater good for the profession at large and for the future of the building industry."

The Alien Element in Our Labor Strikes

WE have arrived at a difficult state of affairs in about everything that concerns the problem of living and the welfare of the community in general. From the surface indications we have been for a number of years impressed with the utter futility of the favorite political and social slogan of the labor profiteers: "America, the Melting-Pot." We found to the dismay of many optimists that when we needed a great army we had been fooling ourselves with an idea. Our melting-pot hadn't melted, and in a time of dire stress we had to teach thousands the language and the elements of what being an American meant. We are finding out a little late in the day that importing labor by the millions, regardless of quality, regardless of any intelligent effort to teach them our language and our national ideals, has proved in the last analysis the worst of bad business. It worked when working was good, when the country was running smoothly and the spectre of the high cost of living following a world war was not yet in sight. But in time of stress every imported Old World theory of protest against law and order came promptly to the surface, and the old-time American idea of the dignity of labor, of mutual respect between employer and employee, was forgotten.

At the bottom of all our ills in the building trades is the uncertainty of labor, the utter lack of their willingness to perform a duty or the least intention of performing it honorably. Shoddy and Shirk seem to be the bosses, and alien agitators and alien blindly led sheep apparently form the nucleus of all our strikes. The strange part of it all is that the remnant of real Americans still in the ranks of labor permit themselves to be led by Old World ideas, that they can be so blind and so insensible in these times of any sense of patriotism or realization of the country's vital need of working as a unit to make up for lost time. Greater production in every line is the solution of the present high-living costs, and certainly the question of better wages cannot be settled by stopping production, by penalizing capital and jeopardizing investments.

The Teaching Programme of the Massachusetts Institute of Technology

The Editor of Architecture,
Charles Scribner's Sons.

Dear Sir: The Department of Architecture of the Massachusetts Institute of Technology announces its plan of instruction in design that has been developed for the coming year. It is believed to contain certain elements that are new which may be of interest to the members of the architectural profession as well as to prospective students.

The instruction in design has been placed in charge of Professor Gardner, and the following special instructors have been appointed to act in association with him:

Mr. Stephen Codman, associate professor in this department from 1916 to 1918, graduate of Harvard University, with the class of 1890, student at the Ecole des Beaux Arts under Monsieur Blondel, 1889 to 1893. He was in independent practice from 1894 until 1905, and subsequent to 1905 has been a member of the firm of Codman & Despradelle. He is a member of the American Institute of Architects.

Mr. Edwin S. Dodge, graduate of Harvard, class of 1895, graduate of the Massachusetts Institute of Technology, Architectural Department, class of 1897, student at the Ecole des Beaux Arts, 1898 to 1902. He studied in Italy from 1904 until 1912, and has since practised in New York and Boston. He is a member of the American Institute of Architects.

Mr. Ralph H. Doane, graduate of the Massachusetts Institute of Technology, Department of Architecture, 1912, where he was known as one of the most brilliant pupils under Professor Despradelle. He came to the Institute from the office of McKim, Mead & White, and has had experience in various other leading New York offices. He was consulting architect to the Philippine Government, in complete control of all government buildings, parks, and city planning, in the towns, provinces, and insular government. He has recently acted as adviser to the mayor of Boston in connection with the new Housing Ordinances. At present he is in practice for himself, associated with C. Howard Walker & Son. He is a member of the American Institute of Architects.

Mr. Harry C. Stearns, a student at the Massachusetts Institute of Technology, Department of Architecture, from 1914 to 1917, including two years of advanced design. He was formerly a member of the firm and head designer for Willis Polk, also head designer for the D. H. Burnham Co. in San Francisco. He has studied abroad, working under Monsieur Chifflot in Paris. During the war he was construction officer in the Navy. At present he is engaged in private practice and as a designer for Cram & Ferguson.

We believe all of these men have unusual qualifications for teaching, and their professional training has either directly or indirectly the background of the Ecole des Beaux Arts. They have been selected with the view of organizing a teaching staff which shall have a common understanding of the aims and methods of school training in architecture, which will insure a spirit of co-operation, and which will give to the courses in design a degree of homogeneity and continuity never before realized.

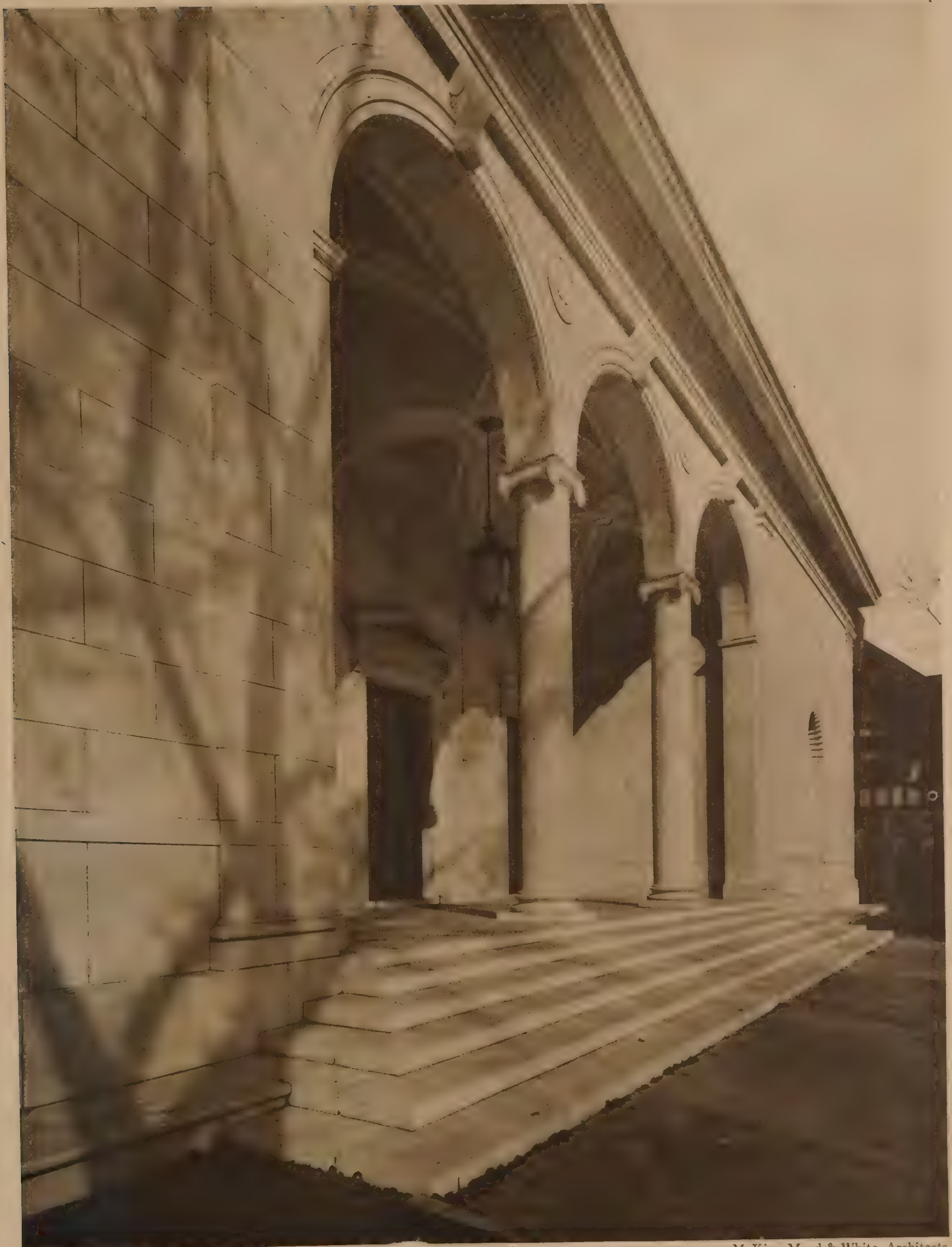
The five instructors associated for a common purpose will guarantee a breadth of view obtainable in no other way. They will form a committee, with regular meetings one evening each week, to discuss matters relating to instruction and to act as a jury to grade and criticise the problems. All of the programmes for all grades will be written by one member of the committee. This is a new feature, a most important one, which we believe will insure the correct relations among the programmes and produce a more systematic course in design than is usual in American schools. For this particular work Mr. Codman has been selected because of his fitness, experience, and interest. He will in the main confine his services to the writing of the programmes and to attending the committee and the jury meetings. Messrs. Dodge and Stearns will alternate in the instruction of the fourth and advanced years, and Messrs. Doane and Stearns will deal similarly with the third year. Professor Gardner will take charge of the second-year work, in which he has been so successful in the past.

Since all of the new instructors will continue the active practice of their profession, we believe we have met, at least in part, the oft-occurring criticism that the schools lack contact with actual practice of architecture. The new instructors are anticipating their duties with an enthusiasm which presages for the department a return to the promising outlook which obtained before the outbreak of the war.

We hope to include in this scheme the occasional Joint Problems with the Harvard School and the Architectural Club which have proved so stimulating both to the students and the instructing staffs.

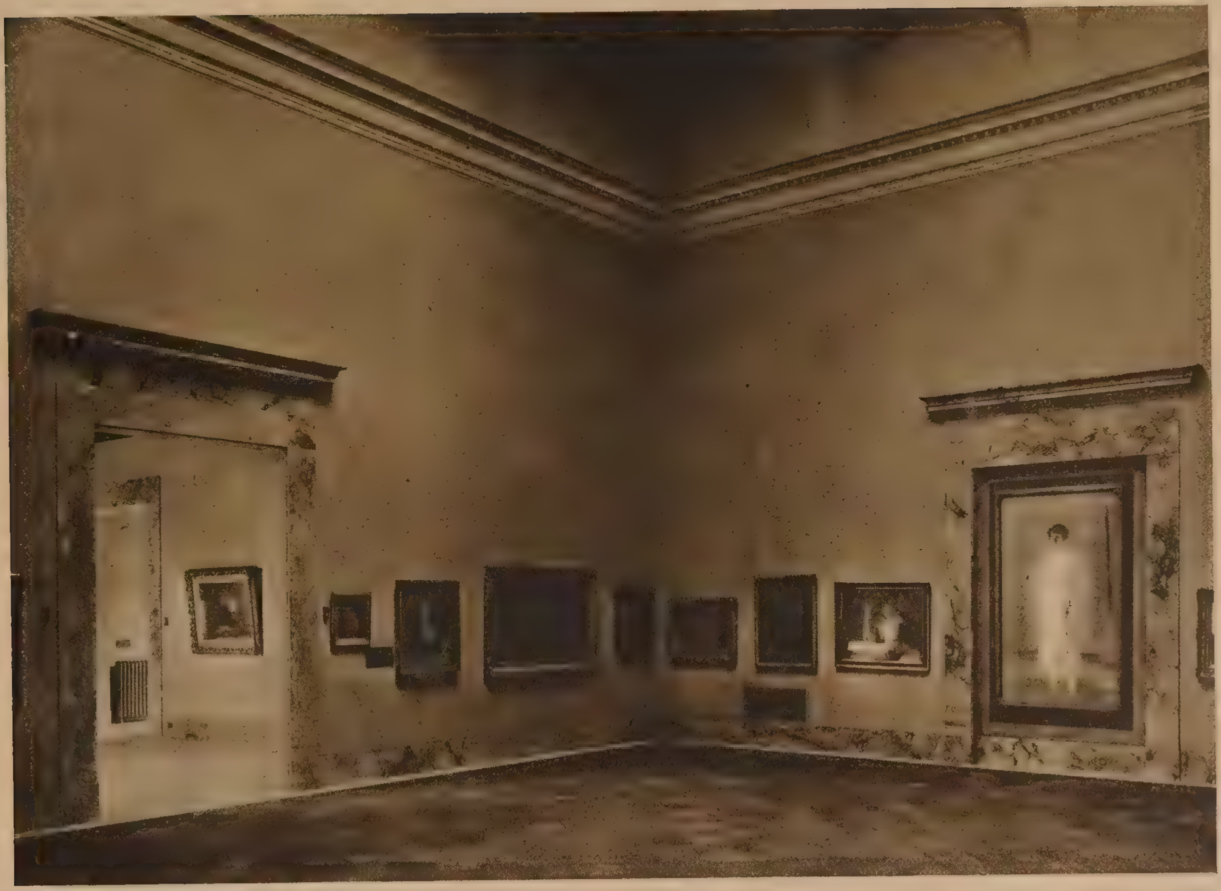
It is to be regretted that owing to exacting professional interests Professor Cram feels that he must sever his connection with the Institute as a member of the faculty, but has consented to continue as a special lecturer, and will still have charge of his courses in Philosophy of Architecture and in History of Mediæval Architecture.

Very truly yours,
W. H. Lawrence.

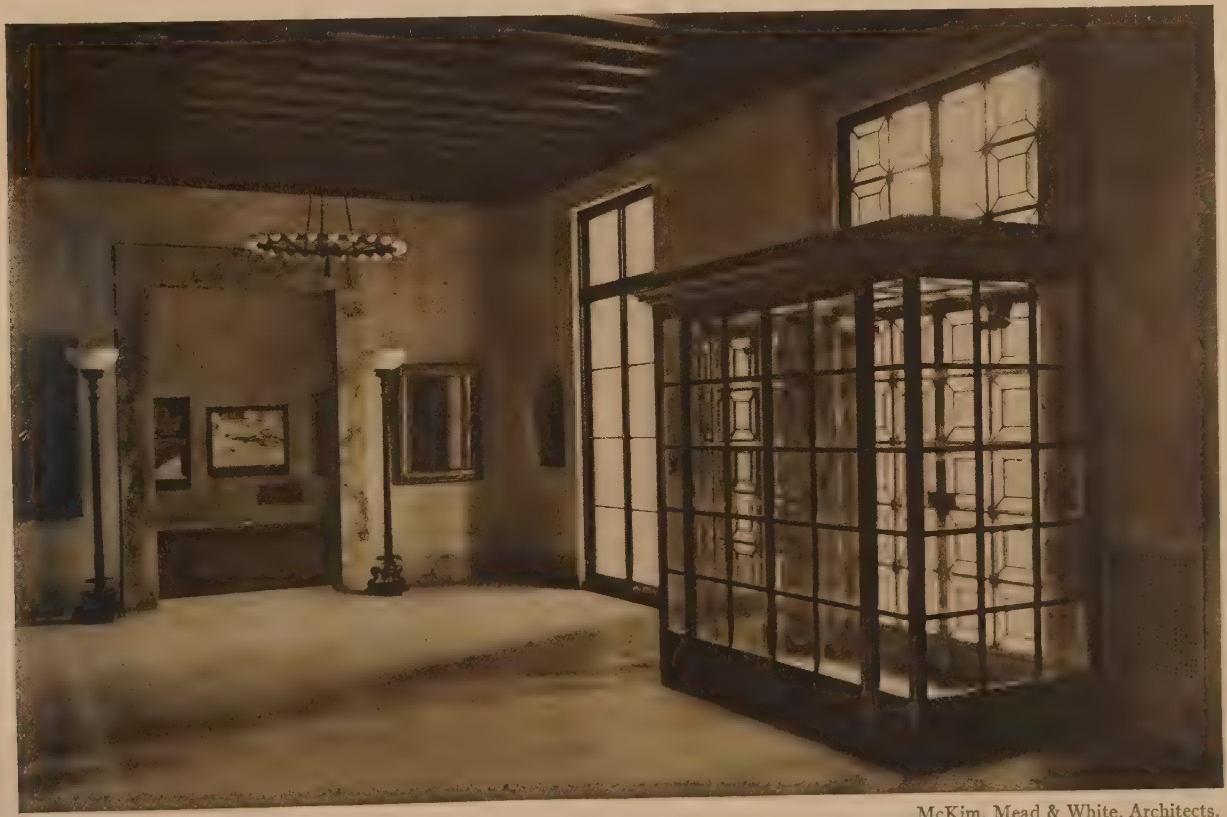


MAIN ENTRANCE, BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

McKim, Mead & White, Architects.



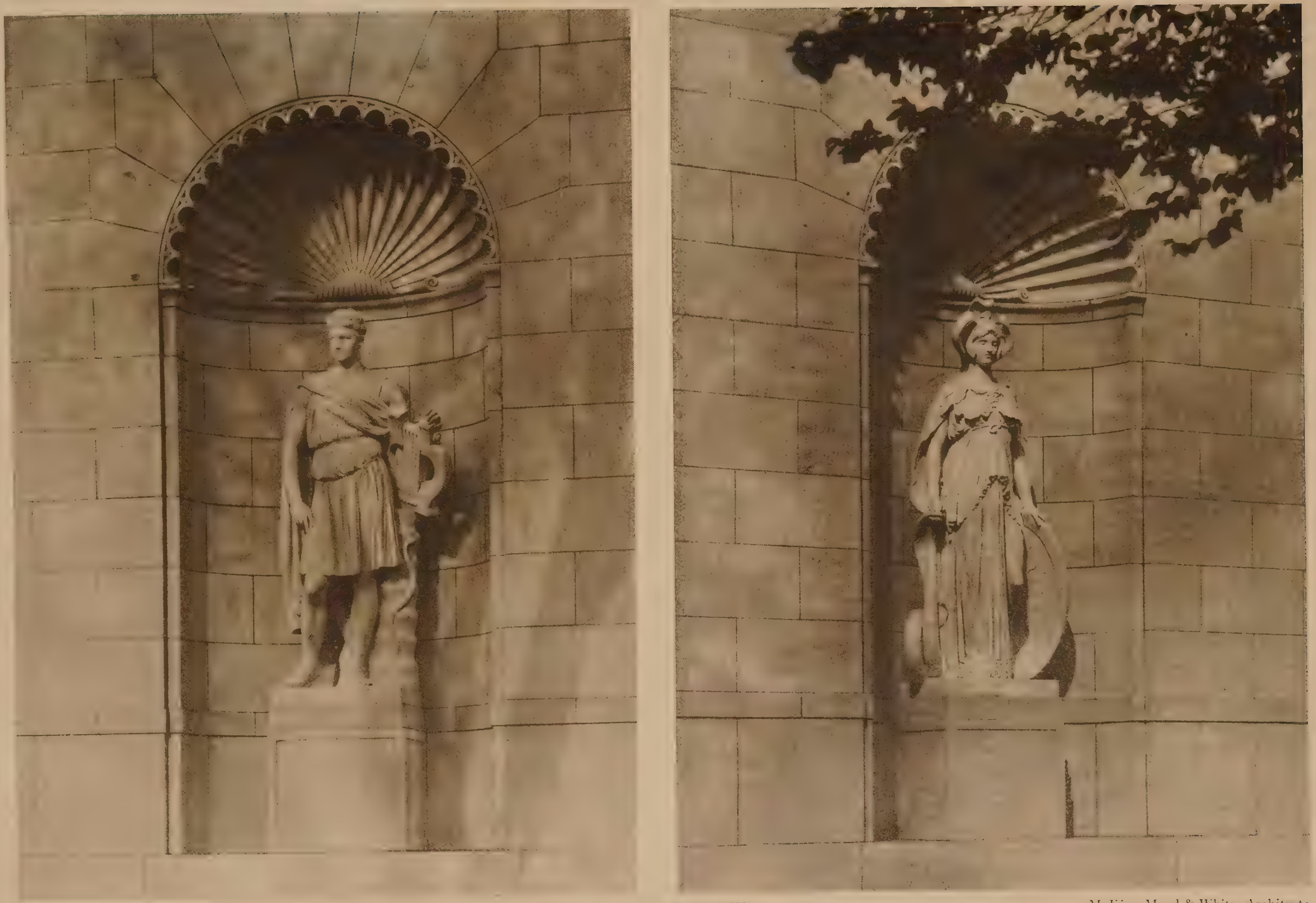
NORTH GALLERY.



SCULPTURE GALLERY.

McKim, Mead & White, Architects.

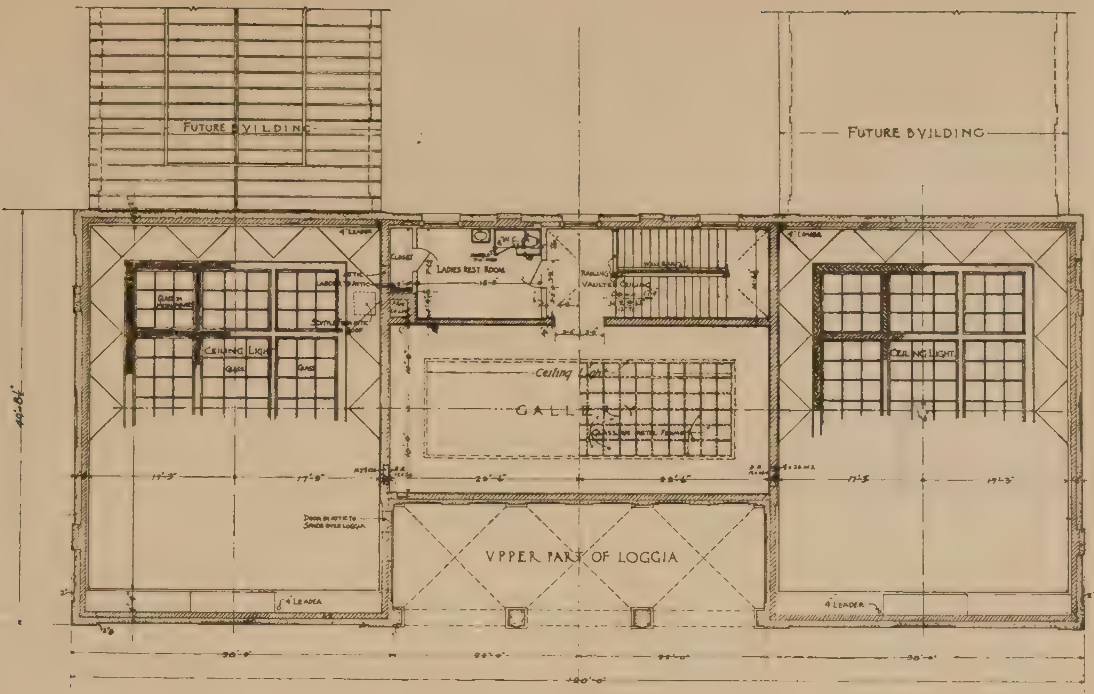
BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.



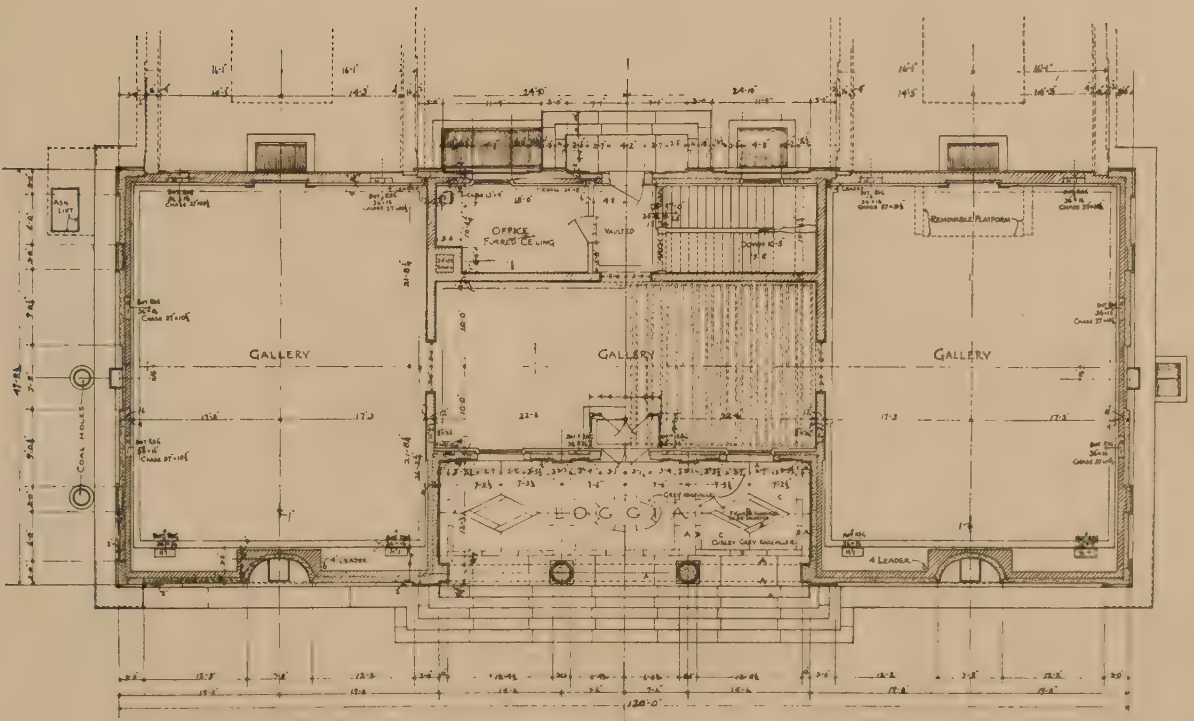
APOLLO. MINERVA. McKim, Mead & White, Architects.

MARBLE FIGURES IN NICHES, BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

By J. Massey Rhind, Sculptor.



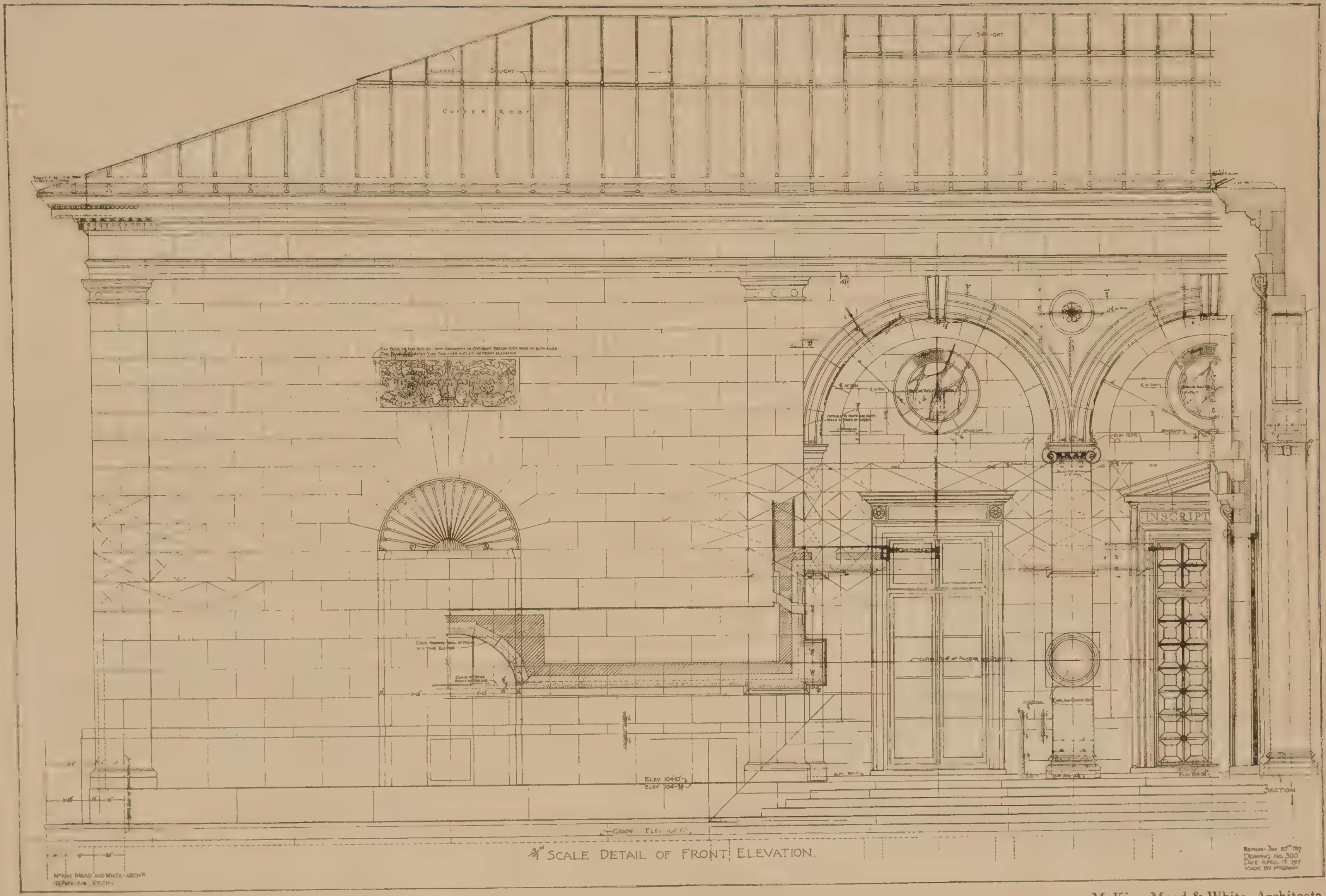
· SECOND · FLOOR · PLAN ·
SCALE: 1/8" = 1'-0"



· FIRST · FLOOR · PLAN ·
SCALE – 1 IN = 8 FT

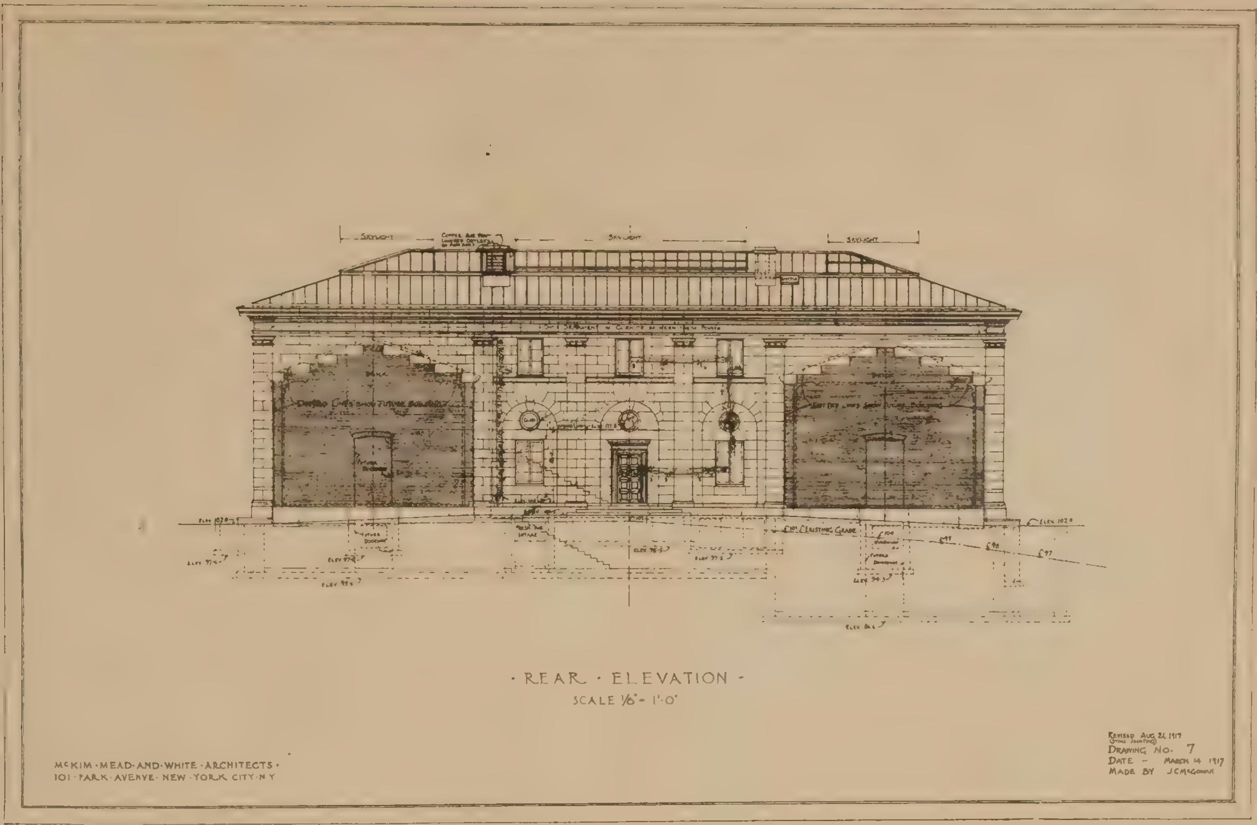
BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

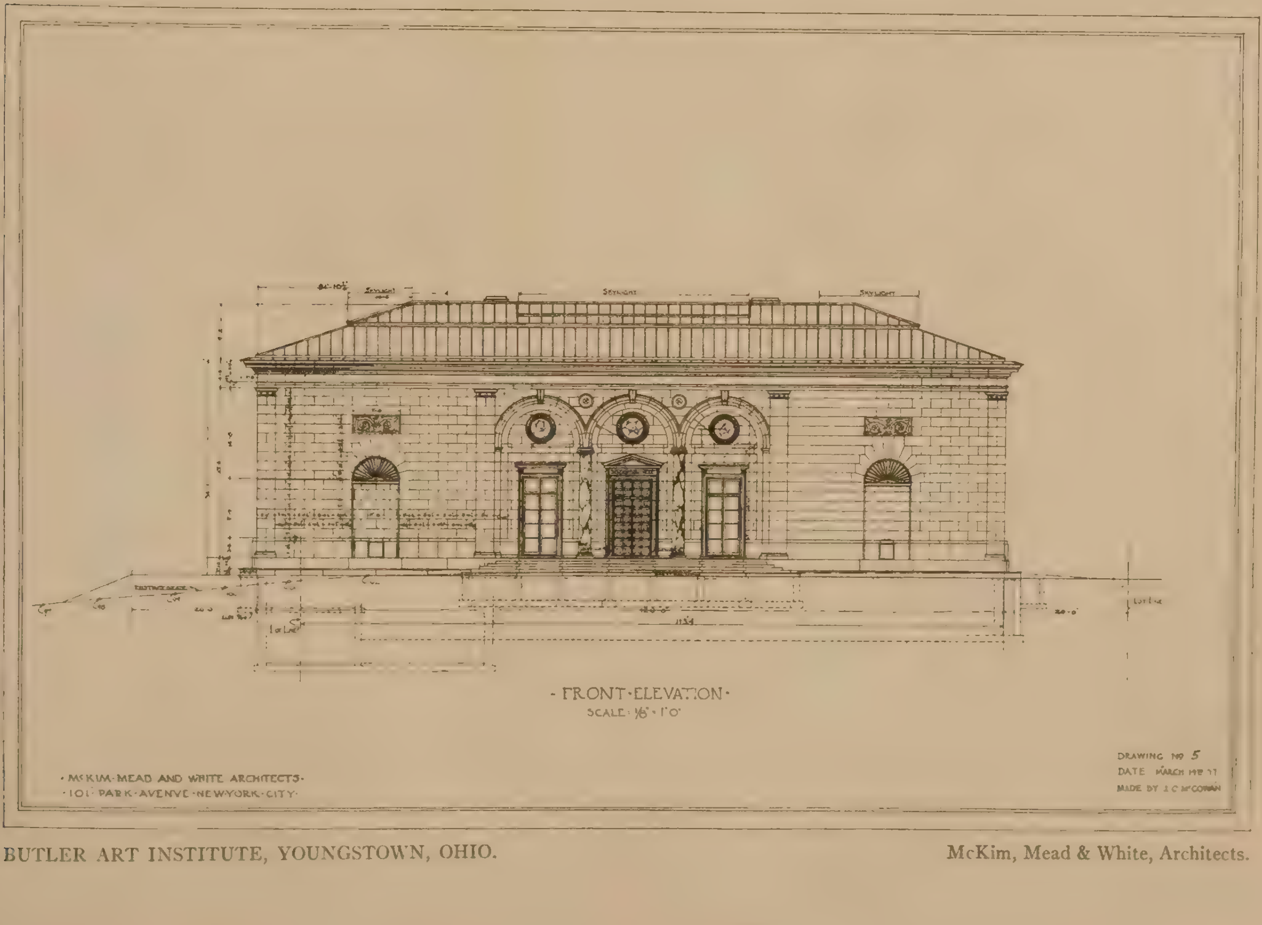
McKim, Mead & White, Architects.



BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

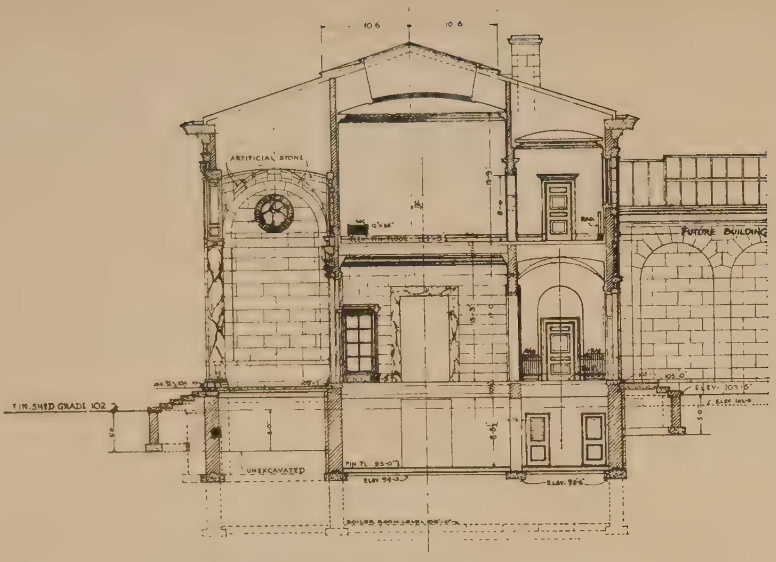
McKim, Mead & White, Architects.


SKYLIGHT
SKYLIGHT
SKYLIGHT
DOTTED LINES SHOW FUTURE BUILDINGS
DOTTED LINES SHOW FUTURE BUILDINGS
· REAR · ELEVATION ·
SCALE 1/8" = 1'-0"
McKIM · MEAD · AND · WHITE · ARCHITECTS ·
101 · PARK · AVENUE · NEW · YORK · CITY · N Y
REVISED AUG 21, 1917
DRAWING NO. 7
DATE – MARCH 14 1917
MADE BY J.C.McGOWAN

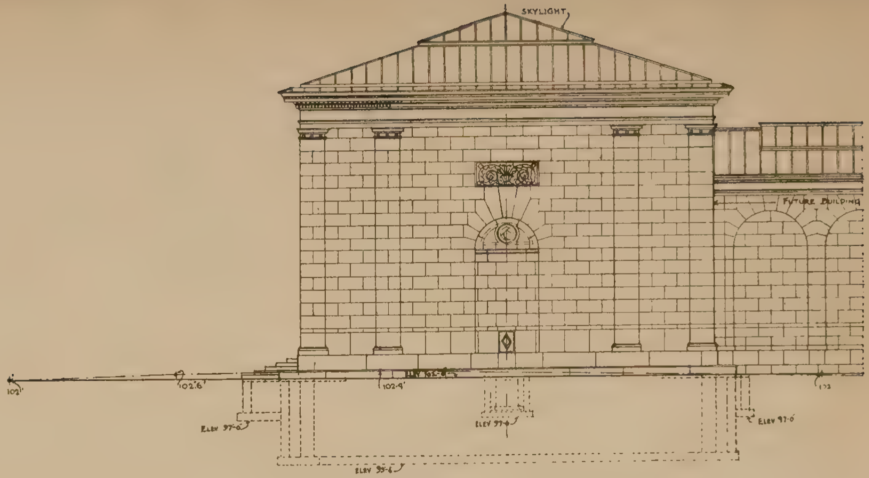


BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

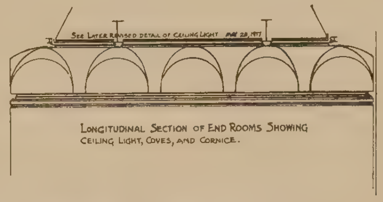
McKim, Mead & White, Architects.



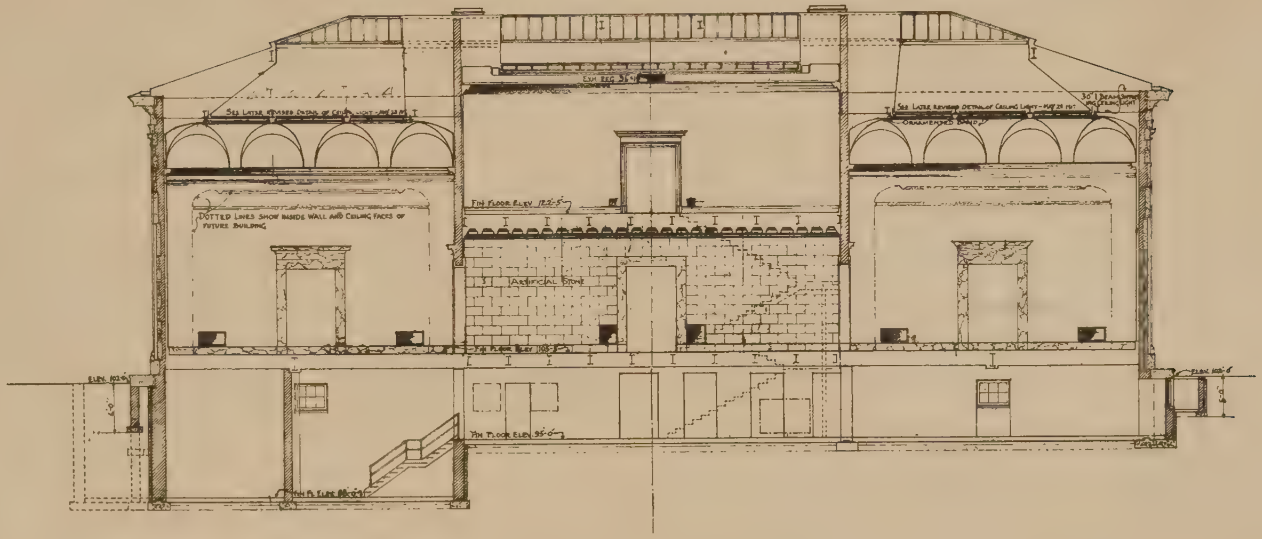
CROSS SECTION



NORTH ELEVATION



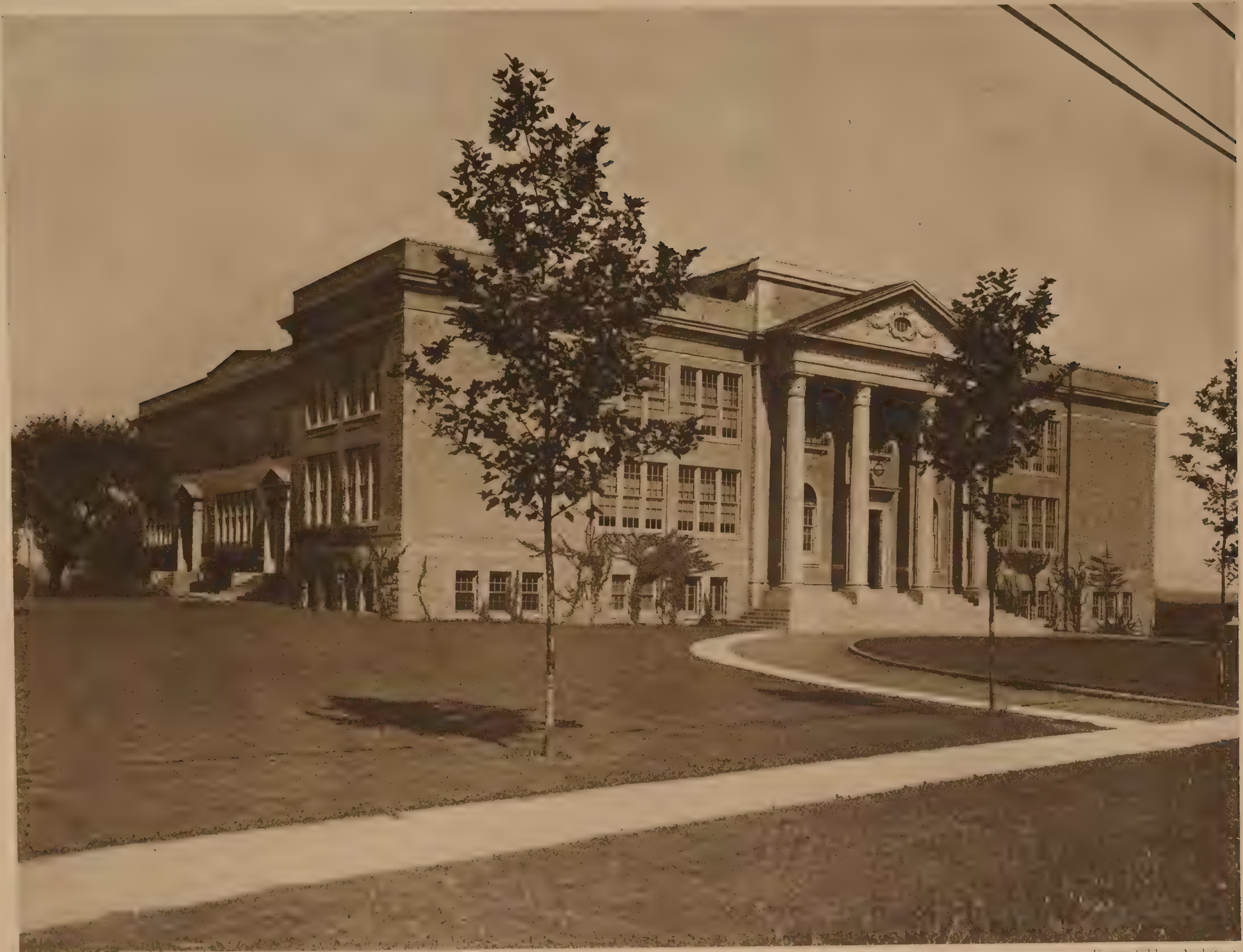
Longitudinal Section of End Rooms Showing Ceiling Light, Coves, and Cornice.


See Later Revised Detail of Ceiling Light
Dotted Lines Show Inside Wall and Ceiling Faces of Future Building
Fin. Floor Elev 122-5
Artificial Stone
Fin. Floor Elev 95-0
Ornamented Band

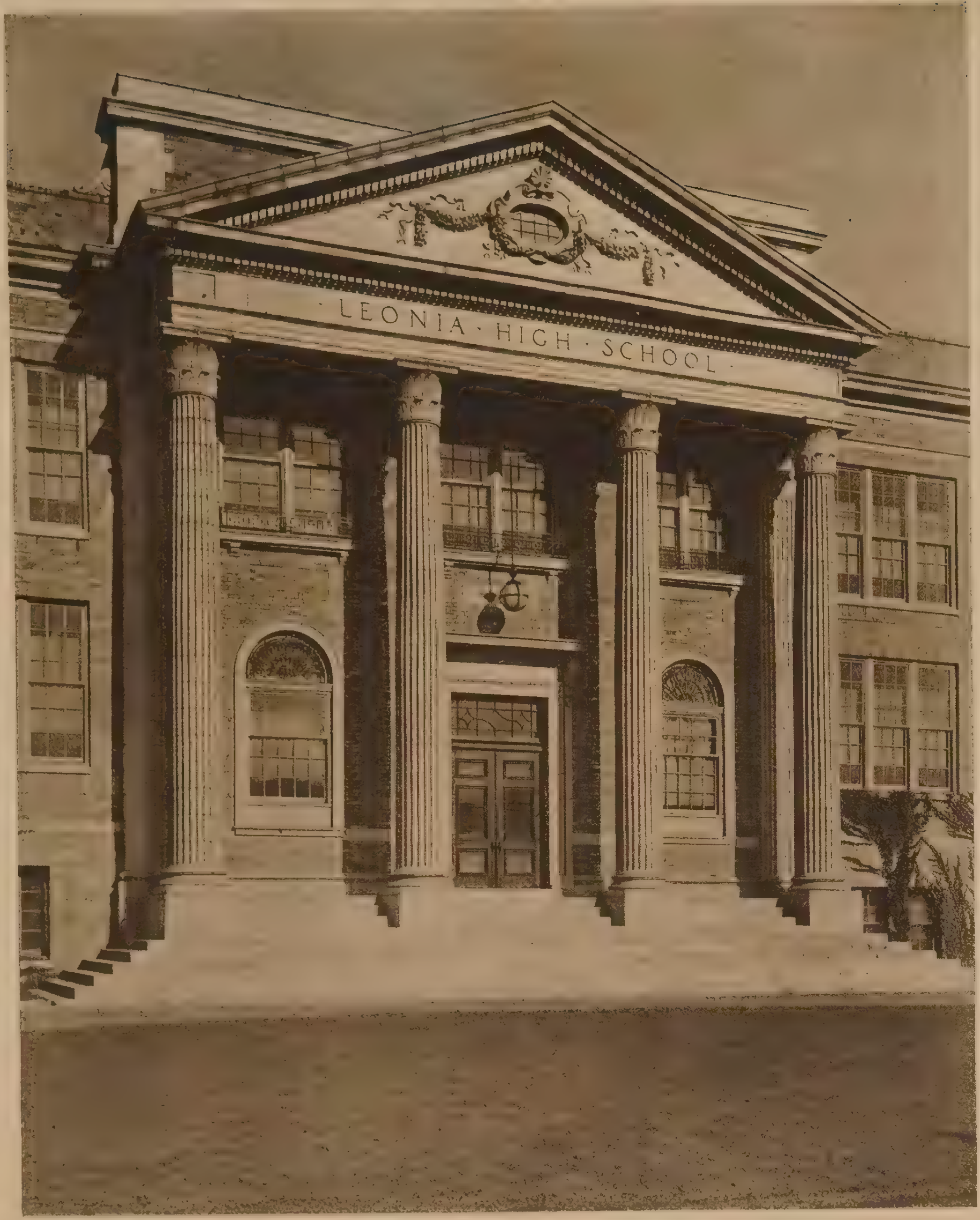
LONGITVDINAL · SECTION ·
SCALE : 1/8" = 1'-0"

BUTLER ART INSTITUTE, YOUNGSTOWN, OHIO.

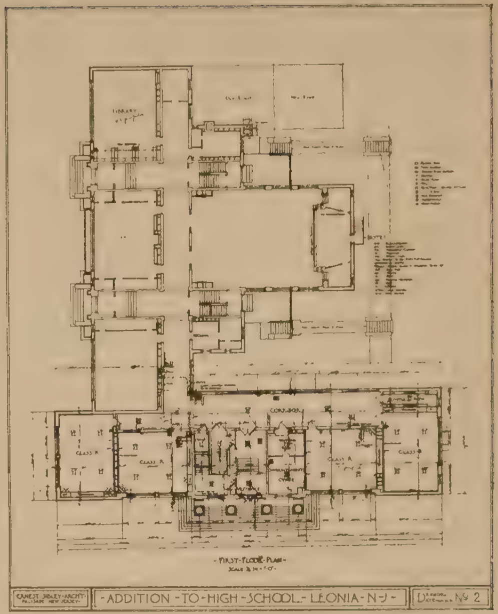
McKim, Mead & White, Architects.

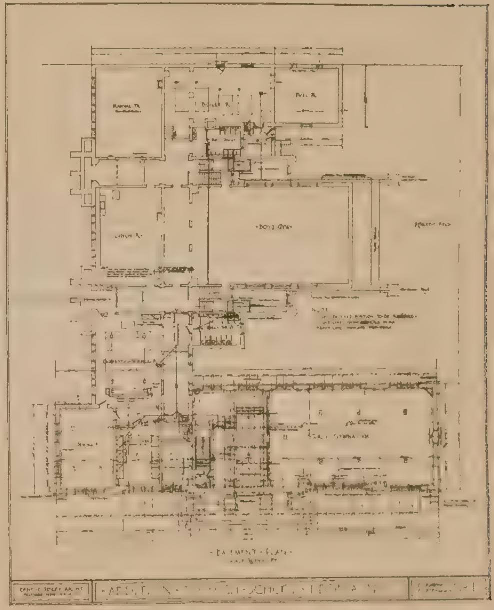


Ernest Sibley, Architect.

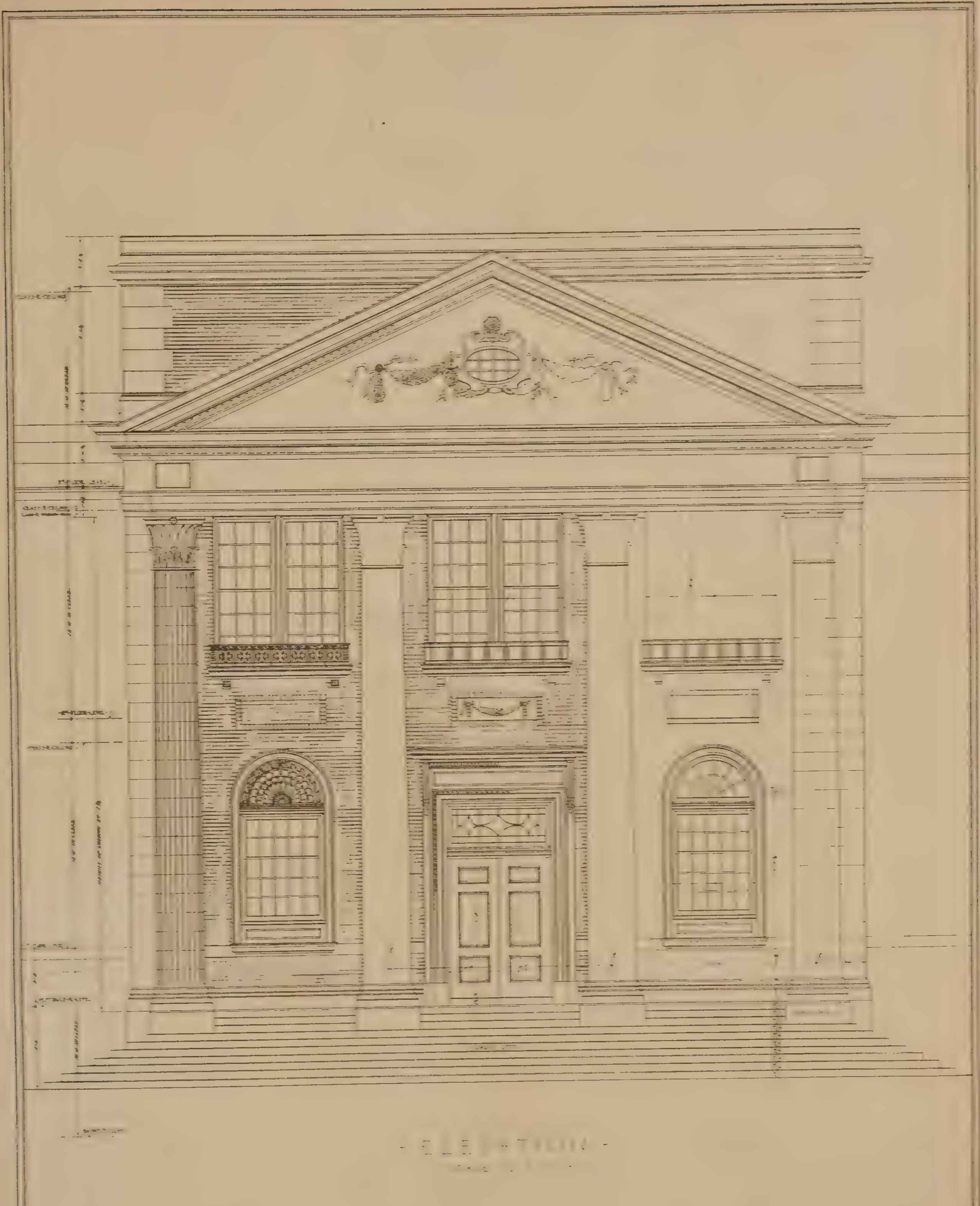


MAIN ENTRANCE, HIGH SCHOOL, LEONIA, N. J.


FIRST-FLOOR-PLAN
ERNEST SIBLEY-ARCHT PALISADE NEW JERSEY
ADDITION-TO-HIGH-SCHOOL-LEONIA-N-J-
Nº 2



Ernest Sibley, Architect.



ERNEST SIBLEY
ARCHITECT
PALISADE NEW JERSEY

SCALE DETAIL OF PORTICO
HIGH SCHOOL BUILDING LEONIA NEW JERSEY

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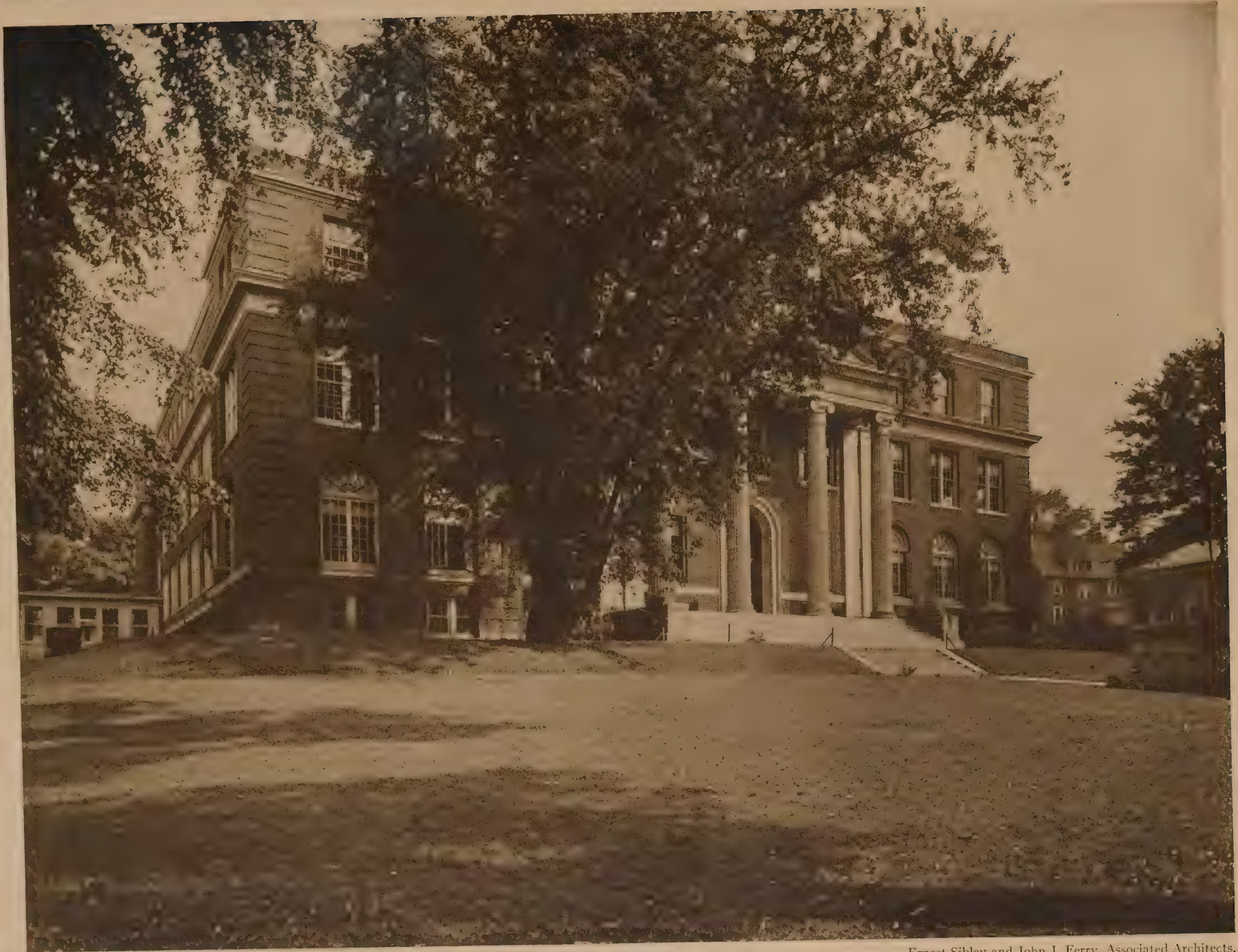
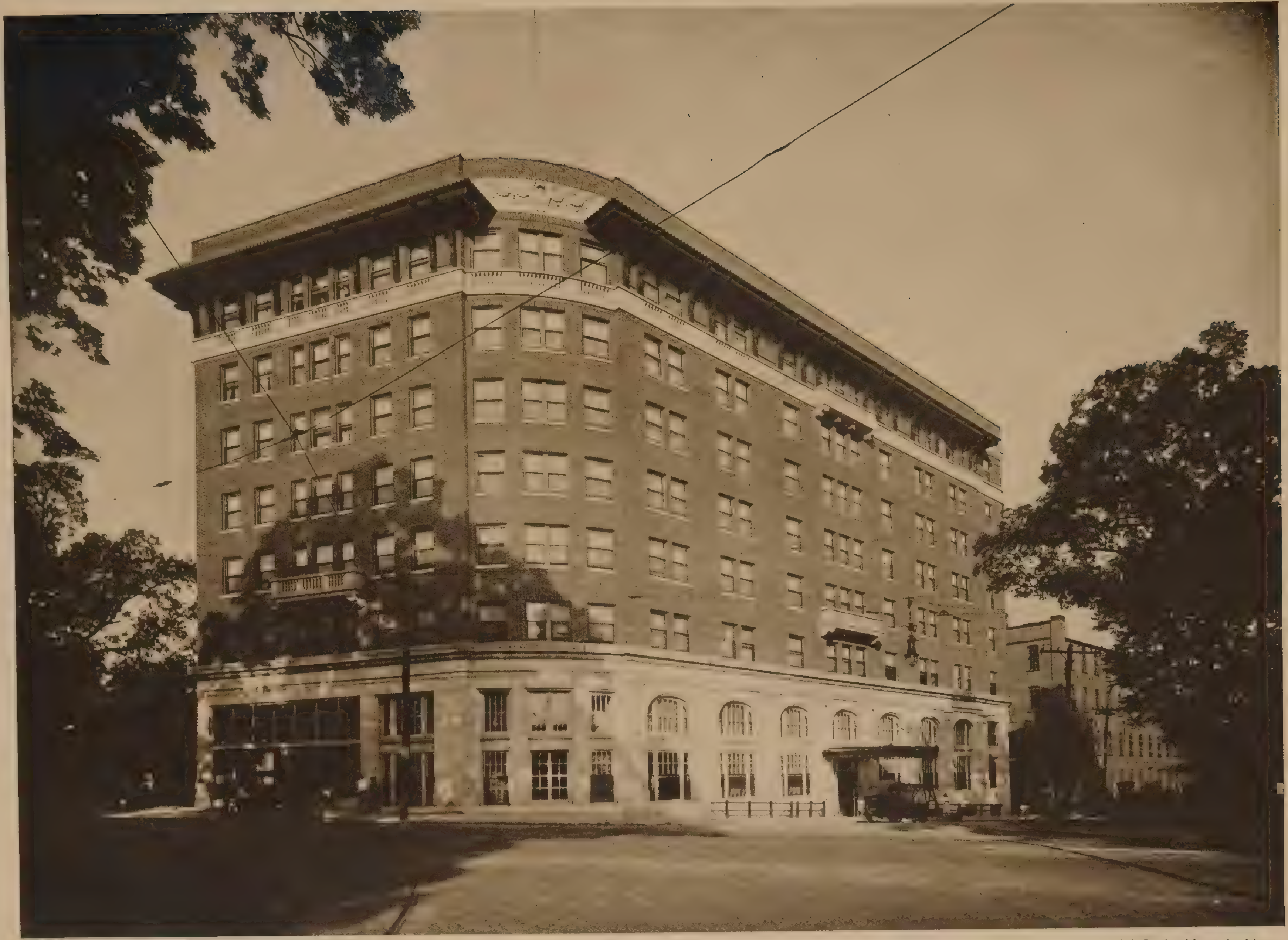
APPROVED BY



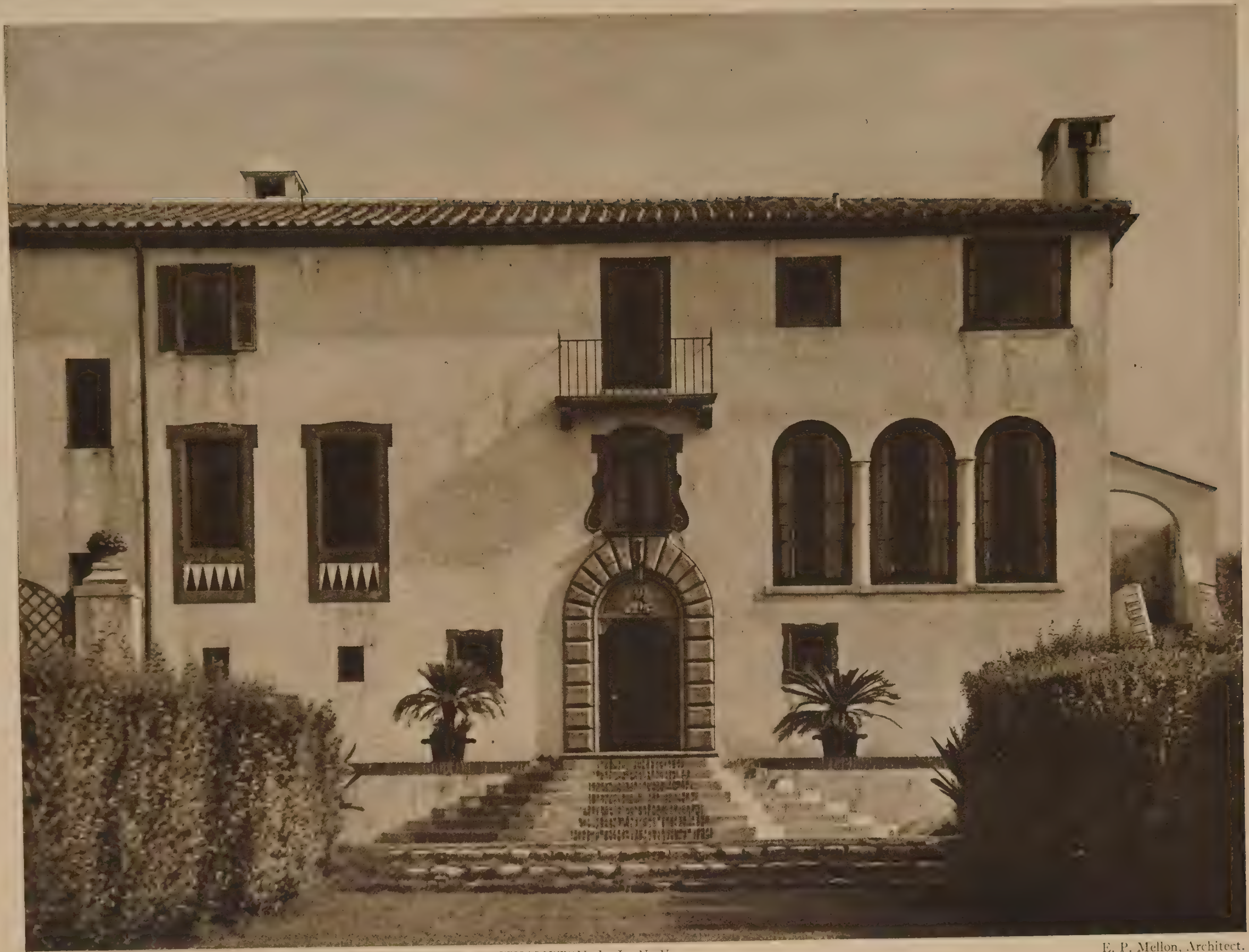
HIGH SCHOOL, ENGLEWOOD, N. J.

Ernest Sibley and John J. Ferry, Associated Architects.



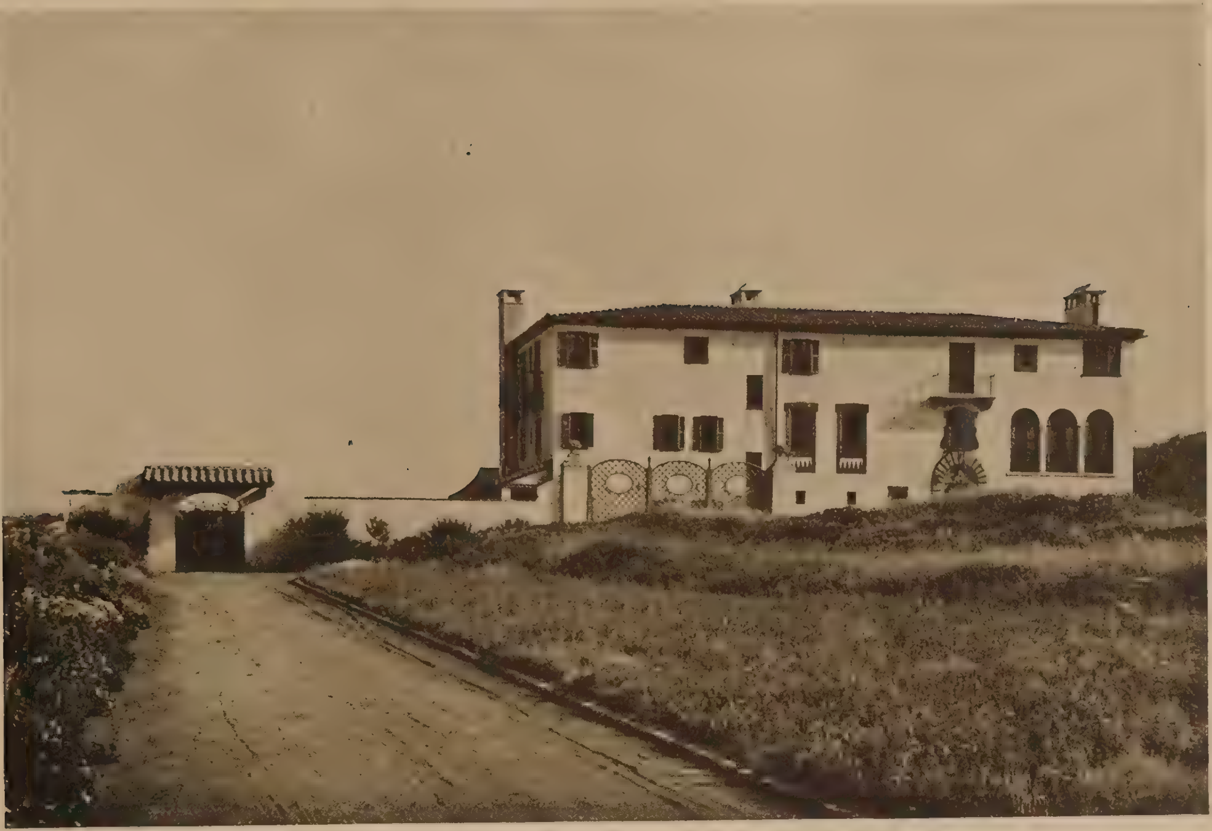
THE O. HENRY HOTEL, GREENSBORO, N. C.

W. L. Stoddart, Architect.

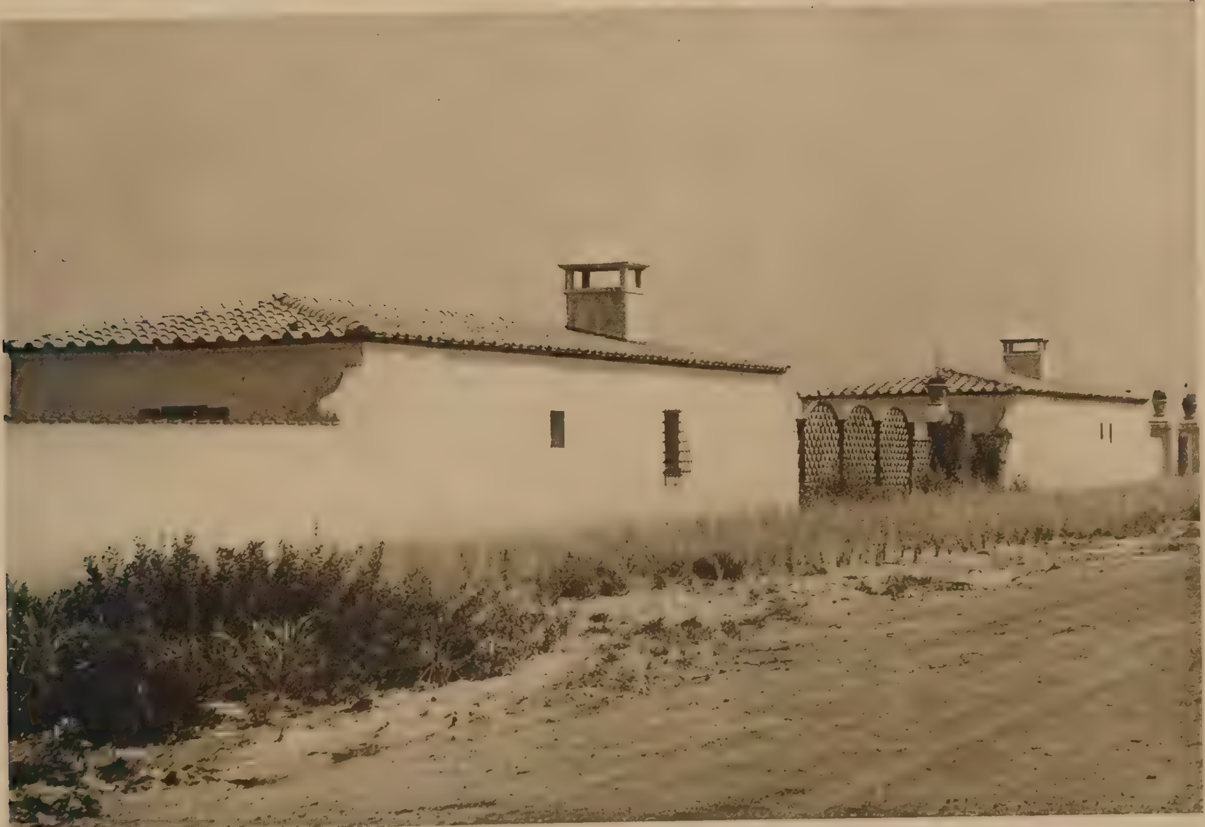


ELEVATION, NORTH FRONT, VILLA MARIA ON THE DUNES, SOUTHAMPTON, L. I., N. Y.

E. P. Mellon, Architect.



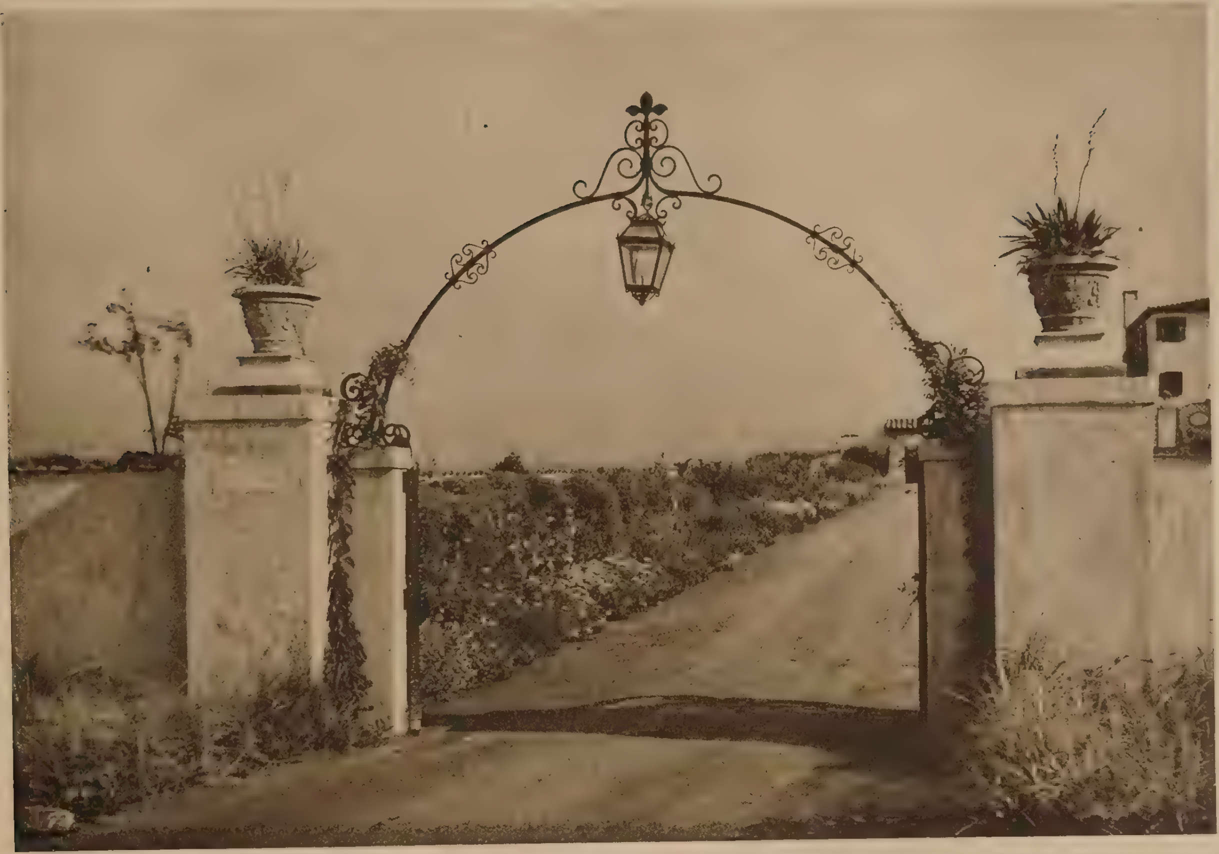
GENERAL VIEW OF NORTH FRONT.



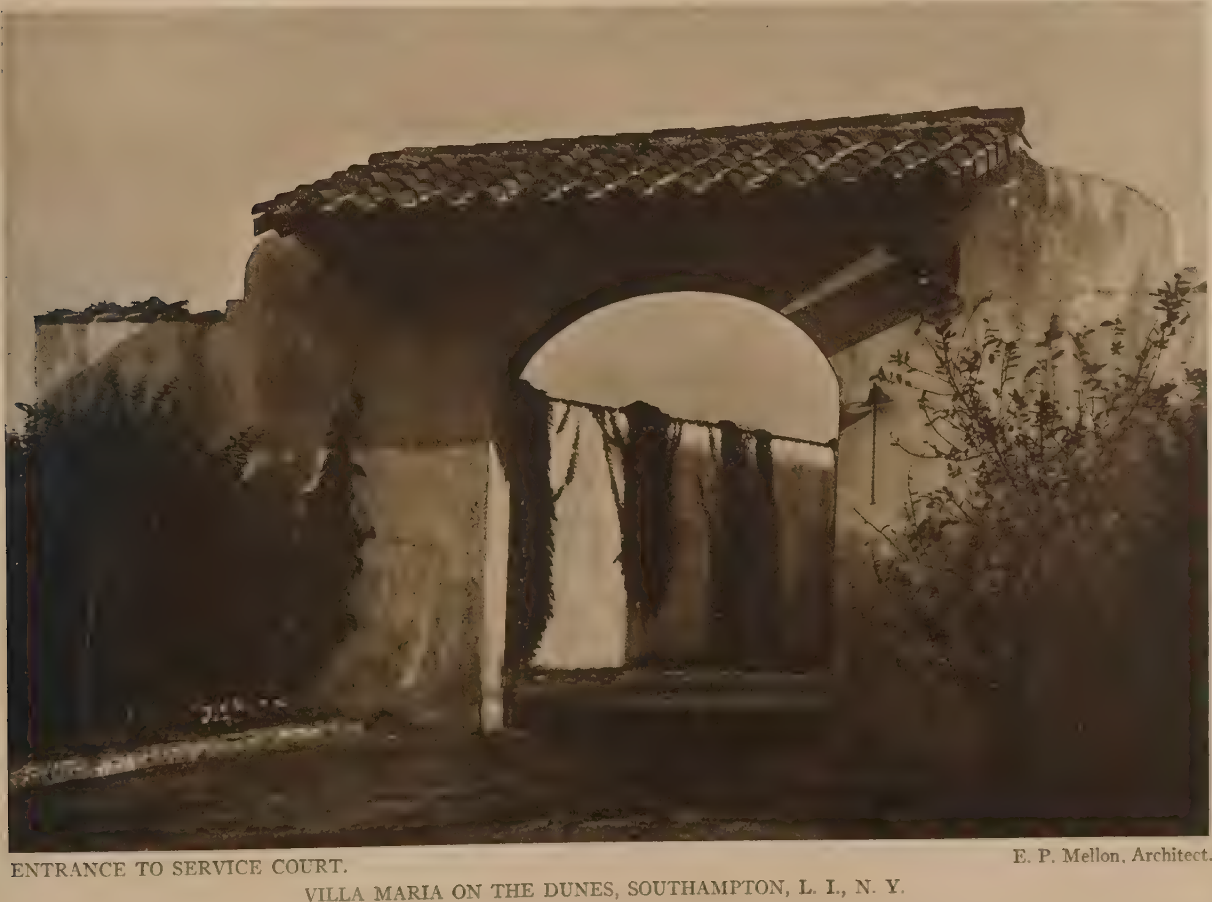
GARAGE AND CHAUFFEUR'S COTTAGE.

E. P. Mellon, Architect.

VILLA MARIA ON THE DUNES, SOUTHAMPTON, L. I., N. Y.



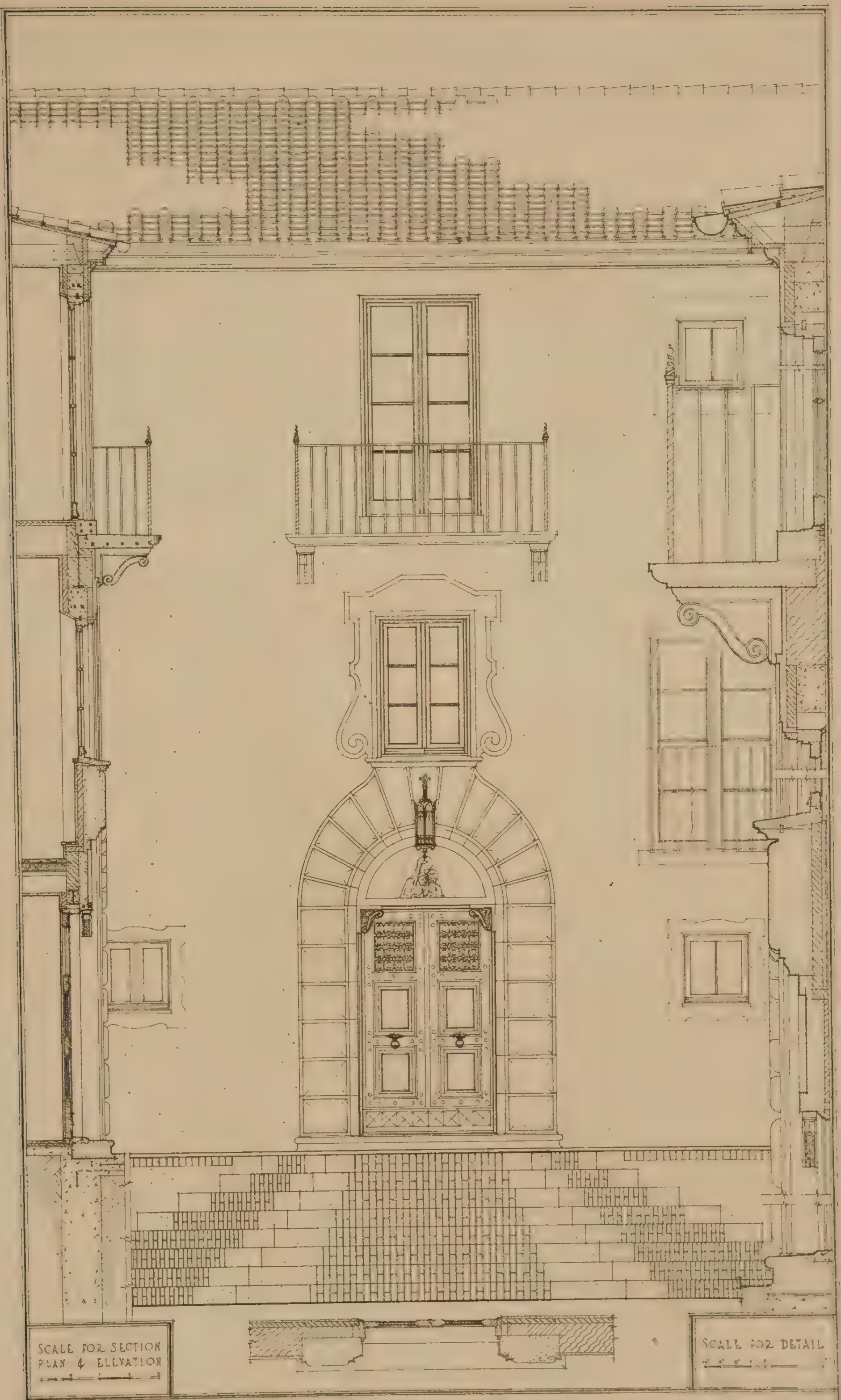
ENTRANCE-GATE.



ENTRANCE TO SERVICE COURT.

E. P. Mellon, Architect.

VILLA MARIA ON THE DUNES, SOUTHAMPTON, L. I., N. Y.



· ENTRANCE DOORWAY ·

· VILLA MARIA · *on the Dunes* · SOVTHAMPTON · L·I·

· E · P · MELLON · ARCHITECT ·

The Villa Maria

E. P. Mellon, Architect

THE designing of a building to conform with its natural environment is about the most important problem which an architect has to take into consideration for solution when the problem of designing is presented.

Some of the facts coming under the head of natural environment are those of elevation and contour of the property, as well as the coloring, character, and atmosphere of the property in question and surrounding properties.

This problem of the relation of a building to its natural surroundings has been successfully solved by the architect, E. P. Mellon, which is clearly demonstrated by the result obtained in the Villa Maria, at Southampton, Long Island.

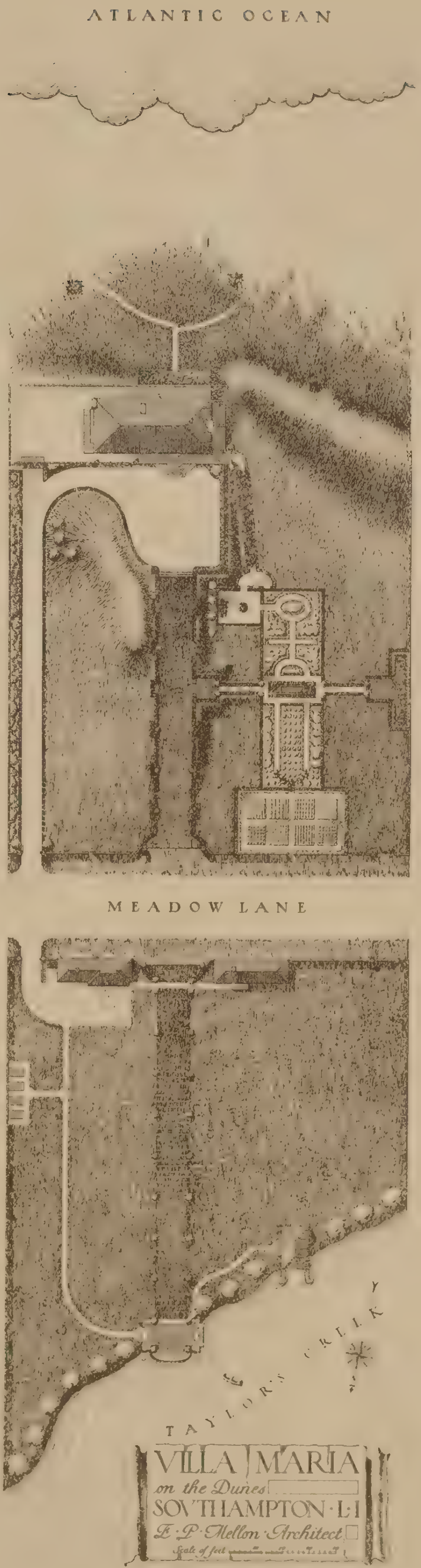
The property on which this building is erected is a narrow strip of rough and rugged sand-dunes lying between the waters of the Atlantic Ocean and those of Shinnecock Bay, the average width of this strip being about 850 feet. This particular piece of property, comprising about six acres, has a frontage on both of these waters of 300 feet. The highest dune, which is on the west of this property, rises to a height of 52 feet, sloping gradually to the east and to the south to the sand of the beach. To the north there is a gradual slope to Shinnecock Bay.

The erection of a house on this wild, narrow strip of sand-dunes was a pioneer undertaking, as never before had any of this strip of land been used for building purposes, and there was no means of access through the deep sand until after the building was started, when Meadow Lane, 50 feet wide, was built to and through the property.

All possible means were used while planning the house and during its erection to preserve the natural contours and beauty of the property as well as the natural growth, which is composed mostly of beach plumb, beach grass, and wild sweet pea.

In the selection of the site for the location of the house consideration was taken of the location of the high dune and its protection of the house from the westerly winds. From the sea side of the house the walls were designed to conform with the natural undulation of the dunes, with the result that the house on this side appears to be only two stories in height, the service court and entrance floor here being below the level of the top of the dune. From the north or entrance side the house shows the full three stories, the service court being on the level of the entrance story.

The driveway running from the main entrance, directly to the entrance of the service court, follows a natural depression in the dune, and swings around the dune, of about 12 feet in height, to the main entrance. Directly from the axis of this main entrance, running straight to the main



South Loggia.

road, there is a tapis-vert of 30 feet in width, bordered on either side by a high hedge. This being the only lawn on the property, it gives a strong and very pleasing contrast to the otherwise ruggedness of the property, and helps to heighten the Italian character of the house itself, the Italian character being considered the most suitable and harmonious for this wild natural setting. The unusually intense blue of the Southampton skies, which blueness is reflected in the ocean, has exactly the same character and feeling as the skies and sea of the Mediterranean. While the brilliant sunlight reflected by the sea and sand casts similar shadows to those found on the borders of the Bay of Naples and the Adriatic Sea, on which shadows Italian buildings are so dependent.

The color of the stucco used is about the same as the sand, being of a deep cream tone, varying from light to dark, and has already been delightfully streaked by the winter storms. Around the smaller windows the raised stucco frames have been stained a dark brown. The stone work around the main entrance also has the worn brown soft tone, while the plaster panel back of the bas-relief of the Virgin and Child is colored a sky-blue. The walls surrounding the property, as well as the garage and chauffeur's cottage, maintain the same color as the main house, and the three buildings are roofed in the most careful way possible, with old color-worn Italian tile, which is laid with an irregular ridge grouted by cement. All iron used on exterior and interior is hand-hammered. The building has taken upon itself the look of ages.

The construction is of terra-cotta block. The floors are of concrete, so that the house is virtually fireproof, and absolutely dry, even during the dampest and most foggy weather. The secret of this dryness is due to the fact that no portion of the house anywhere touches the sand-dunes, the architect having constructed a 10-foot area-way, surrounding the entire house, between the house and the dunes, over which area-way the loggia is constructed, which loggia overlooks the sea. The floor of this loggia is about 40 feet in elevation from the high-water mark, this being the same height as the main floor of the house, which gives every window on this floor and the floor above the full command of exceptionally wonderful views, every window having an outlook over one of the waters.

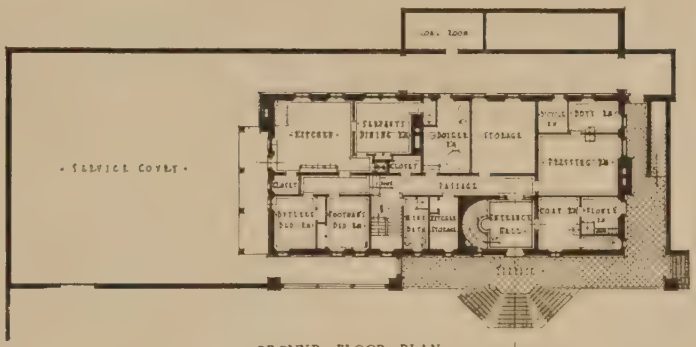
On the interior the same character is followed as on the exterior. The floors of the main rooms and hallways are of old worn black-and-white marble, retaining its beautiful antique patine. The walls are rough-plastered and vary in their delicate dull tinting in the same tones, colors, and variations as those of mother-of-pearl. The plaster is returned into the window-frames, and there is no trim used around the windows or doors, nor is there any wooden base. The window-sills throughout the house are of dark-red tile, the same tile being used on the floors of the bathrooms.

The stairway is semicircular, being completely of cement, rubbed to worn and uneven edges. This cement is painted white. The simple hand-wrought iron railing makes a complete contrast in color with the white of the stairway. The circular walls of the stair-well are penetrated here and there by simple niches.

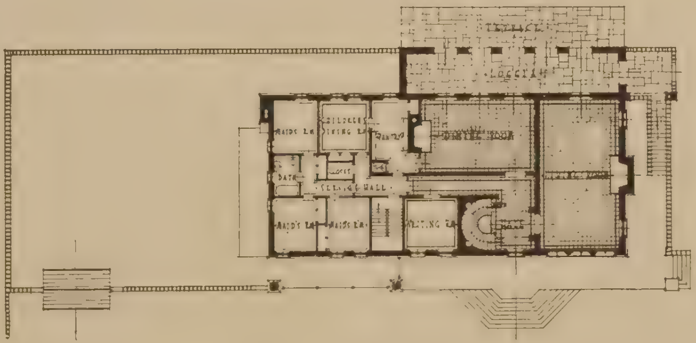
The stone mantels of the house are imported from Perugia, and the very rare and wonderful eighteenth-century frieze, which is placed on the wall of the dining-room, directly under the ceiling, was imported from the Palazzo Torlonia.

The planning of the different floors of this home was not done with the idea of monumental effect, but was planned wholly to suit the needs of the owner and for the sake of convenience.

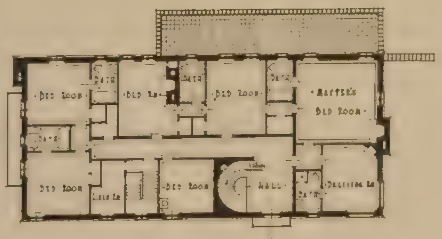
Interior of Loggia.



GROVND FLOOR PLAN

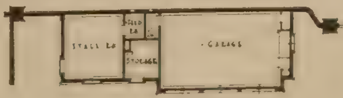


FIRST FLOOR PLAN

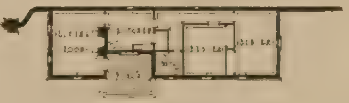


SECOND FLOOR PLAN

VILLA MARIA
on the Dunes
SOVTHAMPTON · L · I ·
E · P · Mellon · Architect ·
· SCALE ·



GARAGE



CHAVFFEVR'S COTTAGE

To Build or Not to Build

By V. J. Clirehugh

TO build or not to build is getting to be a very much discussed question in these days of high building costs. We all hesitate in the hope that prices will be lower, but there is very little ground for believing that costs will ever return to those of pre-war days. It is principally because of the sudden rise in these prices that it is hard to realize that they have come to stay and will in all probability go higher.

During the period of hostilities the energies of the world were devoted to supplying the war needs of the nations, and to this end every class of material was drawn on and all available men and women devoted their energies to the one purpose of winning the war. Building for any purpose except for the necessities of war was prohibited, with the result that the entire country is short of housing facilities and many classes of buildings for manufacturing and other uses.

The world is still short of commodities of every character and the rebuilding of devastated Europe, the work we are doing to satisfy the present demand, the natural competition for the trade of the world, all put a great strain on our natural resources and our raw material market, creating a business condition which will never allow prices to reach their old level.

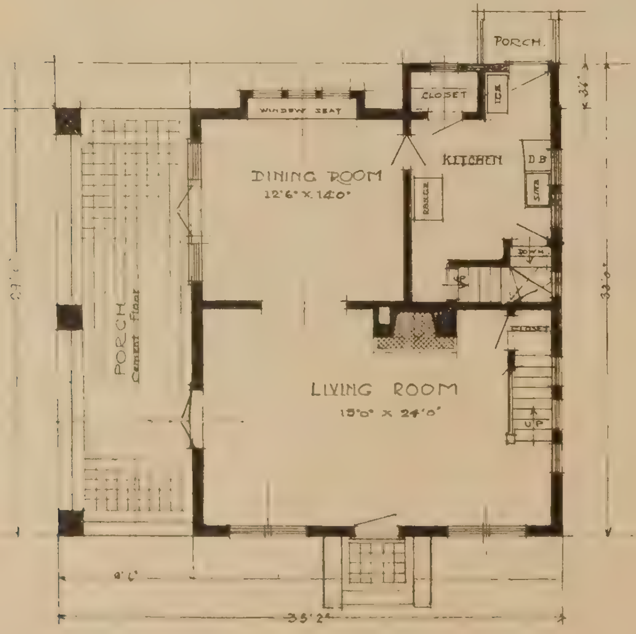
The high wages throughout the country are primarily the cause of high material costs, and while certain adjustments are bound to come, we cannot look for any substantial reductions. Never in the history of the world has the commodity price been lowered very much, particularly after being sustained for as long a period as the present rise has been. The rise in prices during the past five years has been greater than during the previous fifty years and conditions will never go back to where they were. Certain commodities are bound to go higher in cost as financial arrangements are made, so that credits can be extended to foreign countries.

In the building material market prices have advanced in the last four years from 30 per cent to 100 per cent. Structural steel which could be contracted for at $55 per ton in 1914 now costs $90 per ton; brick which was sold for $8 per 1,000 in 1914 is now bringing $18; framing lumber for which we paid $35 is now $65; cement which sold for from $1.80 to $2 now costs $3.25; excavation cost in the old days from 30 cents to $1 per yard, but now costs from $2 up.

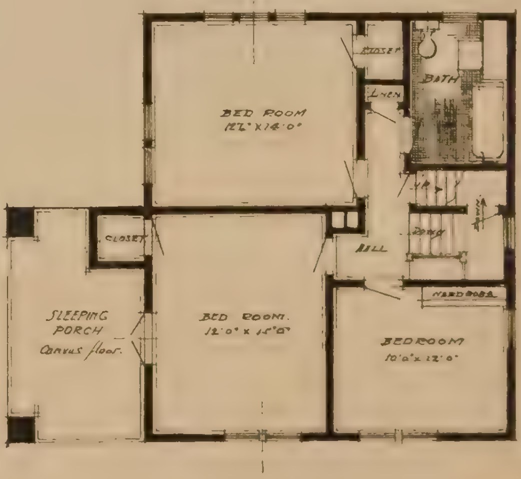
All of the materials which enter into the cost of a building are subject to transportation charges, and these have increased up to 100 per cent, according to locality, while the cheap labor used in the manufacture of these materials has increased from 50 per cent to 100 per cent. The great demand which was felt during the war for building labor caused a great many inefficient men to be employed and paid large wages for overtime work. This overtime work is now abolished and the efficiency of labor is getting better, due to regular hours and steady work.

At the present time there is a great scarcity of common labor, due partly to the fact that so many foreigners have returned to their native shores and largely to the fact that we have had no immigration for the past five years.

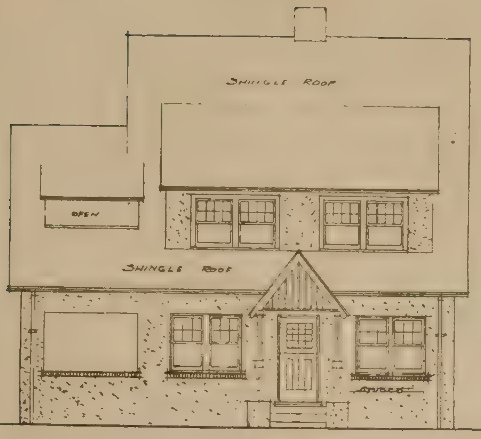
The contractor to-day finds it very hard to secure sufficient mechanics to handle his work, and as the necessary building goes on, using all the available labor, the workman's wages will not be reduced. The real-estate interests and other capital are doing all in their power to encourage building, and there is bound to be sufficient work



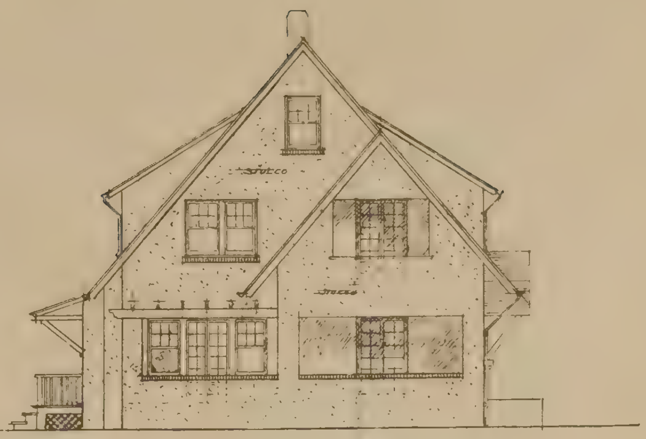
FIRST FLOOR PLAN



SECOND FLOOR PLAN



~ FRONT ELEVATION ~



SOUTH ELEVATION.

to keep the prices of both labor and materials at their present price or increase them.

The demand for housing alone is tremendous, and will have to be met, and those who start their operations now will be able to finish or at least get well along before the big business gets well under way.

The house shown was built in 1914 at the costs shown, and will cost to-day 60 per cent more, but there is no material in this building that will not be in great demand, and no reason to believe it will be reduced at all, certainly not for many years.

The house is built with stone foundation walls, 8-inch hollow-tile upper walls, stuccoed, two to three coats plaster. Double floors throughout, with first quality comb-grain pine-finish floors. Chestnut trim in dining and living-room, and basswood throughout the balance of house. House is heated by steam and has one bath-room and one toilet in cellar. Shingle roof. Colored cement porch, marked off as tile and cement cellar floor.

The price includes a complete house, except for electric-light fixtures and decorations.

COMPARATIVE ESTIMATES OF COST

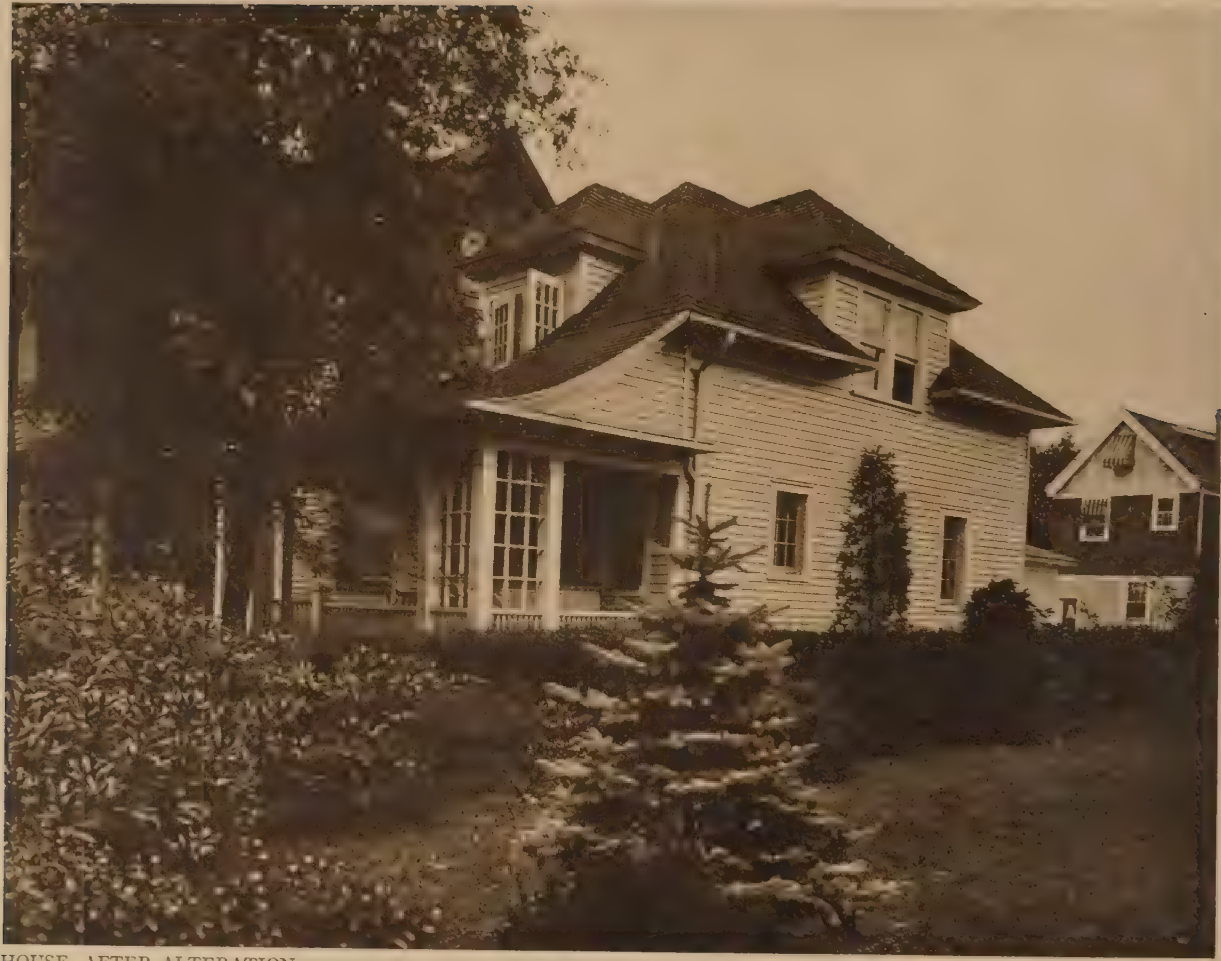
	COST IN 1914	COST OCT. 1, 1919
Excavation	$75.00	$125.00
Foundation walls	125.00	150.00
Cellar floor and chimney	150.00	200.00
Hollow-tile walls, 8-inch block, laid	200.00	300.00
Framing timber	500.00	875.00
Shingles	90.00	150.00
Carpenter labor	750.00	1,200.00
Trim, doors, and windows	700.00	1,300.00
Painting	300.00	450.00
Tinsmith	75.00	125.00
Plastering	300.00	600.00
Plumbing and heating	600.00	1,000.00
Electric light	100.00	150.00
	$3,965.00	$6,665.00
Builder's fee, 10 per cent	396.50	666.50
	$4,361.50	$7,331.50

Protection Against White Ants

SINCE white ants are difficult to eliminate from the woodwork of a building when once established, every precaution should be taken to prevent their gaining entrance. Where possible, foundations of buildings should be entirely of stone, brick, or concrete, including stone columns or pillars in the basement to support the floor above. Make the floors and walls in the basement or cellar of concrete, and lay the floors on a gravel base. Where stone or concrete foundations are impracticable, use timber impregnated with coal-tar creosote.

Lay basement window-sills and frames over concrete, and do not allow the woodwork to come in contact with the ground. Never sink untreated timber in the ground or in moist concrete. No wood should be in contact with the ground. Complete dryness of the foundation and basement walls is an important means of rendering buildings safe from attack; therefore, provide for air spaces between the ground and wooden flooring, and see that the basement floors are well-drained.

If white ants gain access to buildings, examine the foundation timbers and other woodwork in the basement, and determine the point of entrance. After removing the damaged wood, drench the ground with kerosene-oil, then replace damaged timber with rock, brick, concrete, or metal work, or if timber must be used, see that it is treated with coal-tar creosote. Since ants always require access to damp earth, shut off this source of moisture and the insects will not be able to extend their work further, and will perish.

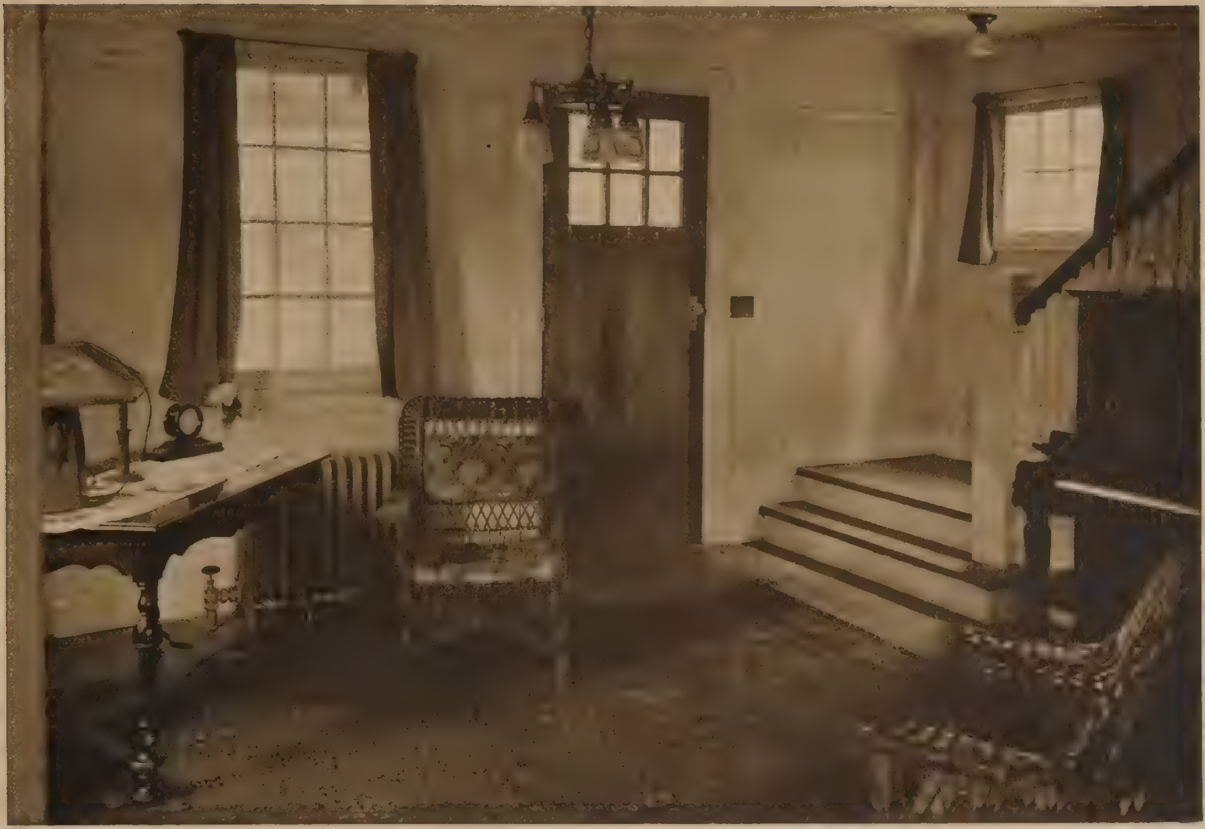


HOUSE. AFTER ALTERATION.

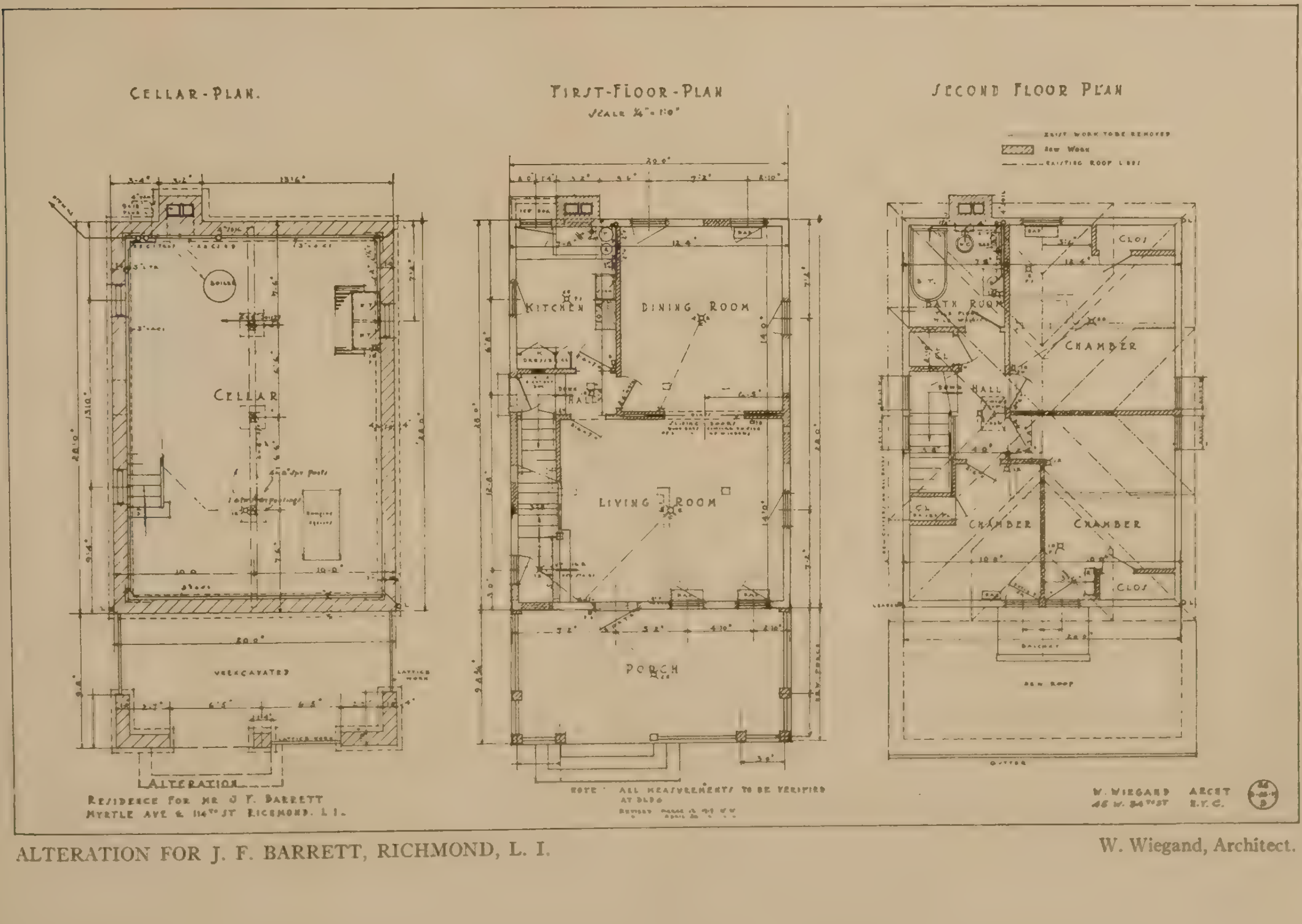
STABLE, BEFORE ALTERATION.

FOR J. F. BARRETT, RICHMOND, L. I.

W. Wiegand, Architect.

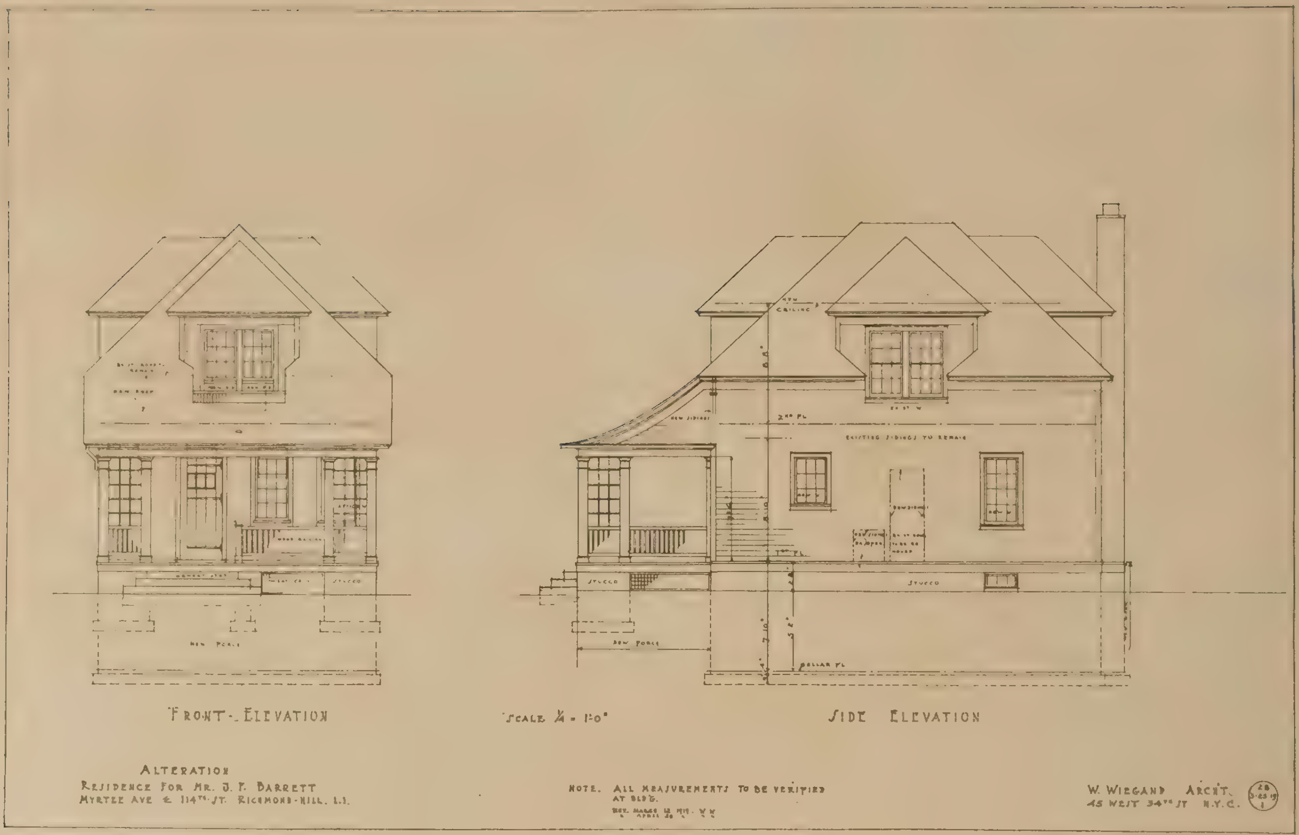


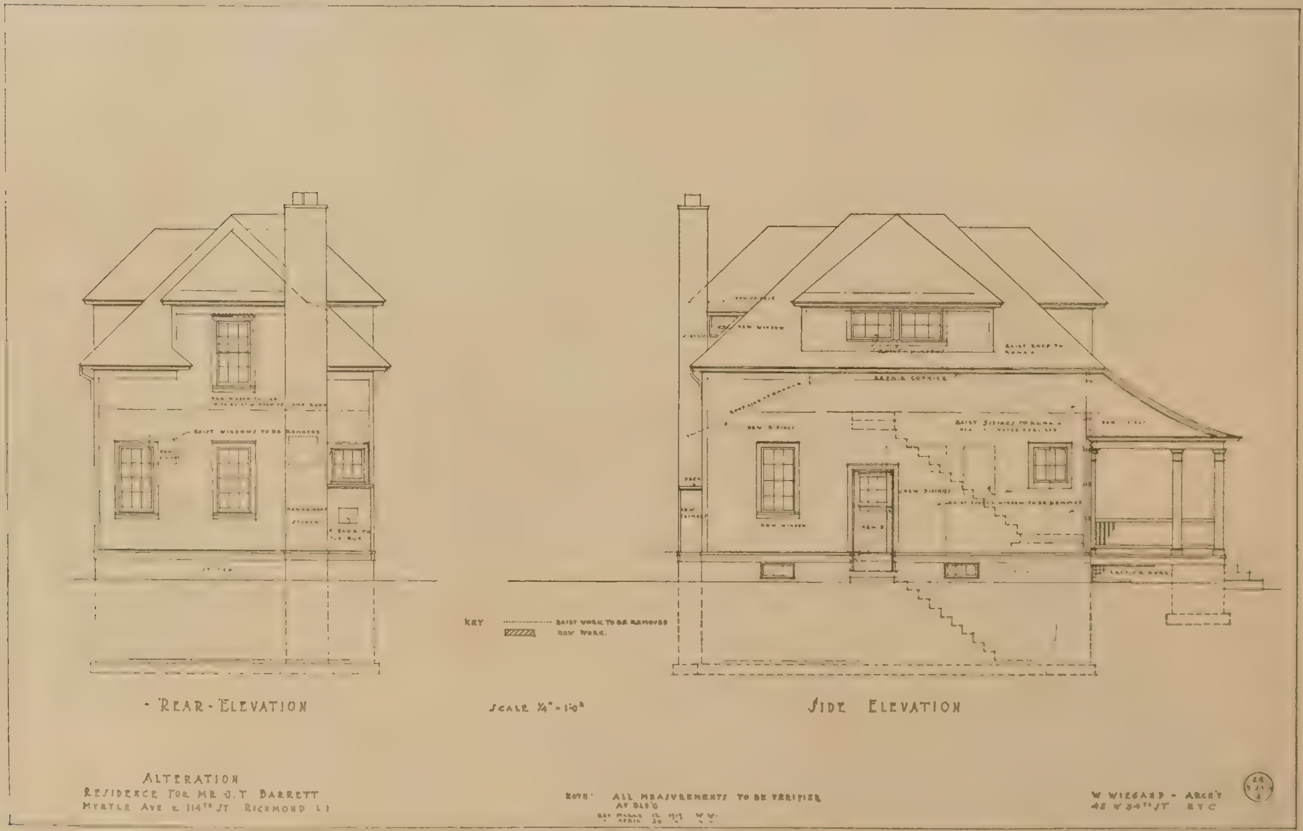
LIVING–ROOM.



ALTERATION FOR J. F. BARRETT, RICHMOND, L. I.

W. Wiegand, Architect.


FRONT - ELEVATION
SCALE ¼ = 1'-0"
SIDE ELEVATION
NEW PORCH
2ND FL
EXISTING SIDINGS TO REMAIN
STUCCO
CELLAR FL
ALTERATION
RESIDENCE FOR MR. J. F. BARRETT
MYRTLE AVE & 114TH ST. RICHMOND-HILL, L.I.
NOTE. ALL MEASUREMENTS TO BE VERIFIED AT BLD'G.
W. WIEGAND ARCH'T.
45 WEST 34TH ST N.Y.C.



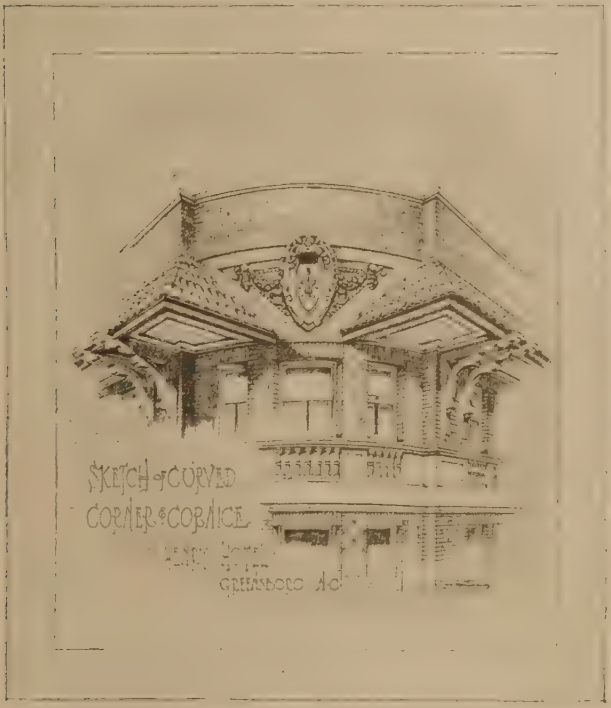
ALTERATION FOR J. F. BARRETT, RICHMOND, L. I.

W. Wiegand, Architect.

The O. Henry Hotel, Greensboro, N. C.

W. L. Stoddart, Architect

WITH its spacious and inviting entrance on Bellemeade Street the principal features of The O. Henry ground floor are delightfully emphasized in the large and comfortably equipped lounging-room, lobby, and dining-room. The lounging-room, circular in form, with its "homey" fireplace and cozy alcoves, located at the corner, is a distinct feature of The O. Henry. The lobby is one of the most attractive of southern hotels. It is an imposing room of pleasing proportions, vaulted ceilings, and caen stone wall treatment, and circassian walnut wainscoting. The mezzanine, located over the office, will provide a comfortable writing-room. With decorations all in perfect harmony, carried out in the Adam period, this lobby is a pleasing introduction to the spacious and hospitable O. Henry.



The dining-room adjoining the lobby is a continuation of the lobby treatment, spacious and airy in its furnishings, and with an outlook on Bellemeade Street with a separate entrance direct to the street; with a mezzanine balcony where the ladies may enjoy their afternoon tea, and from which a direct view through the lobby to the lounging-room is obtained, viewing all the delightful features of the ground floor. All these give a subtle charm to the O. Henry Hotel.

On the second floor perhaps one of the most interesting features is the room dedicated to O. Henry, decorated with photographs, and a complete O. Henry library and paintings depicting scenes dear to the heart of O. Henry readers.

The ballroom or assembly hall adjacent to the O. Henry room, with its large reception-room and grand staircase to the lobby, form the combined social rooms ideal for ball or banquet. A service pantry directly connected with the kitchen below affords prompt and efficient service.

Dedicated to the pleasure of its guests, the beauty of this ballroom will be enhanced by its decorated walls, vaulted ceilings, artistic hangings, and ivory-finished woodwork.

The principal consideration in the planning and construction of The O. Henry was to provide the highest type of modern hotel accommodations in every department.

While there are comfortable rooms for the man who wishes to sleep, bathe, and shave in comfort, but who must limit his expenditures, there are rooms and suites for the man who wants the comforts and furnishings of a home.

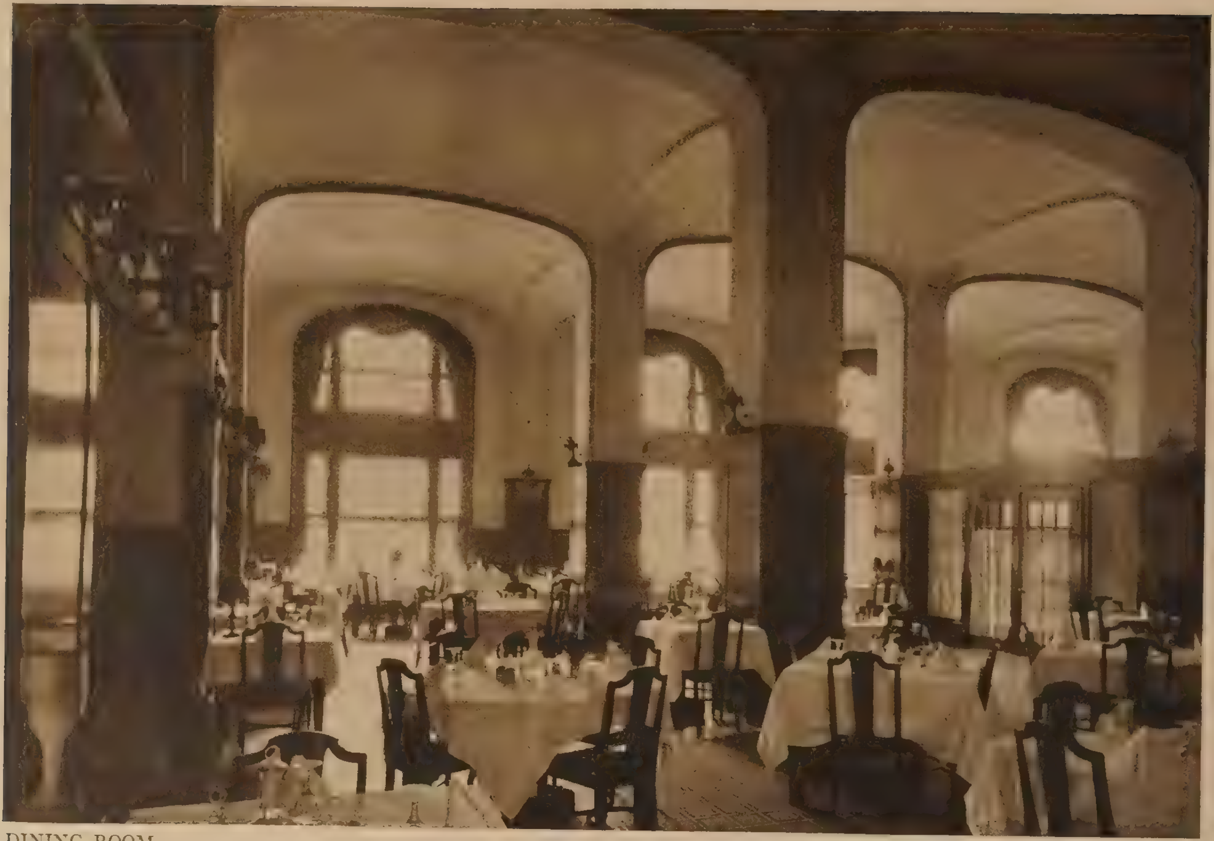
The O. Henry contains one hundred and seventy guest-rooms, each with a private bath, the others with built-in tub baths.

Every floor has running ice-water.

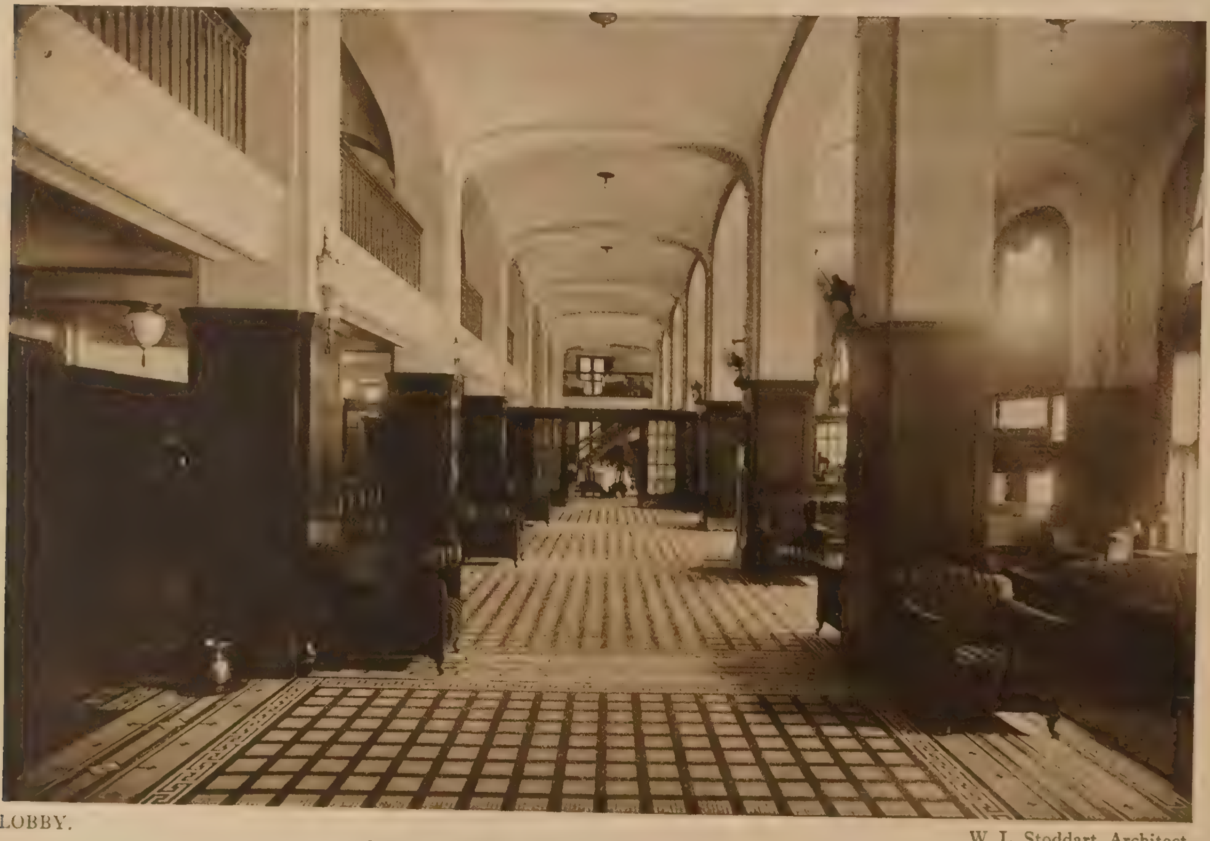
The building is provided with equipment for enforced ventilation, with purified air in all of the public rooms and throughout the kitchen and service pantry of the building.

Quiet is secured for all guests' bedrooms by double door and vestibule enclosures at all elevators.

Lighting Fixture in Dining-Room, Hotel Farragut, Knoxville, Tenn. Panels representing ancient and modern feasts, done in Chinese enamel, giving all the brilliant detail of the antique work.



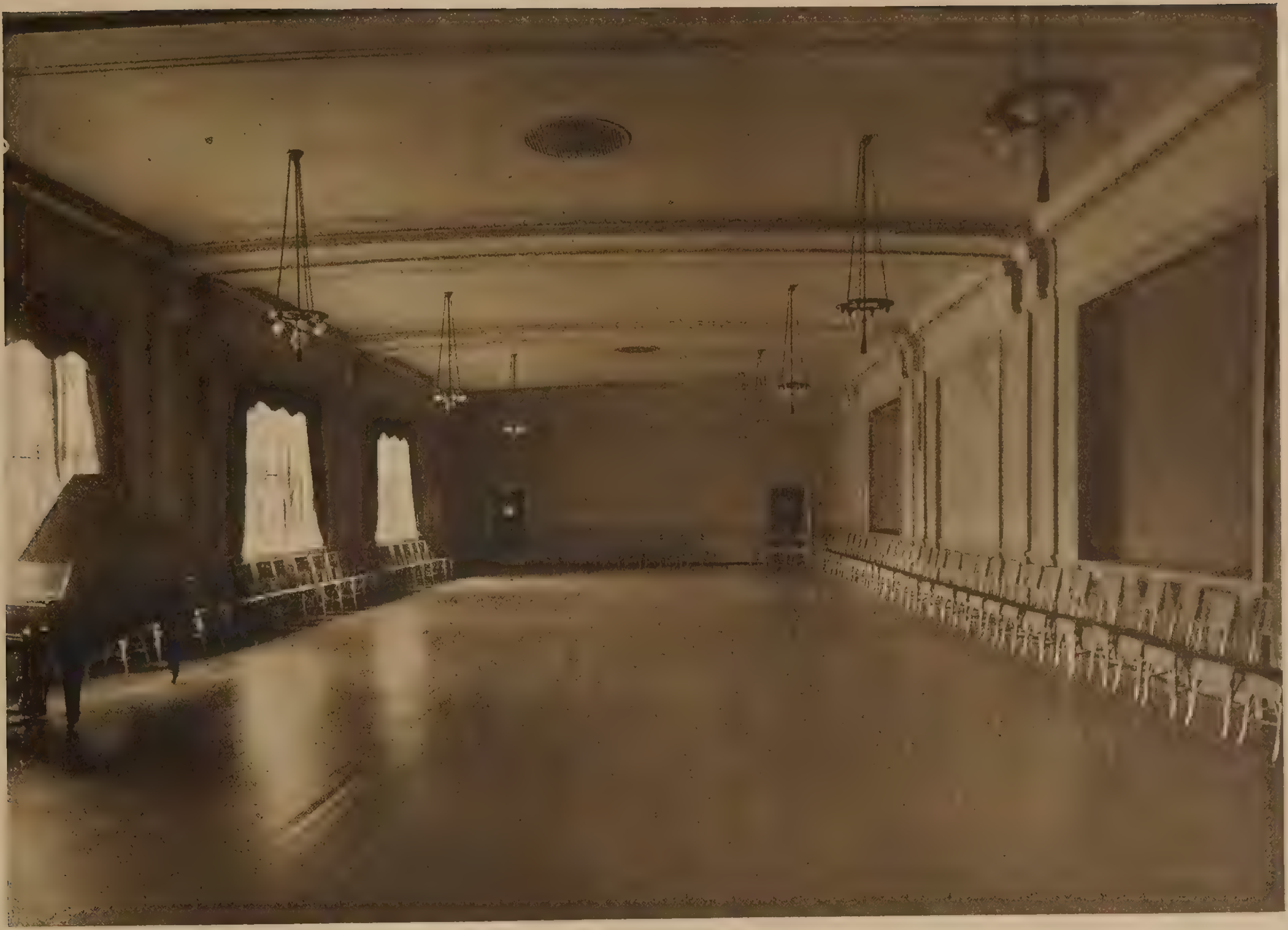
DINING-ROOM.



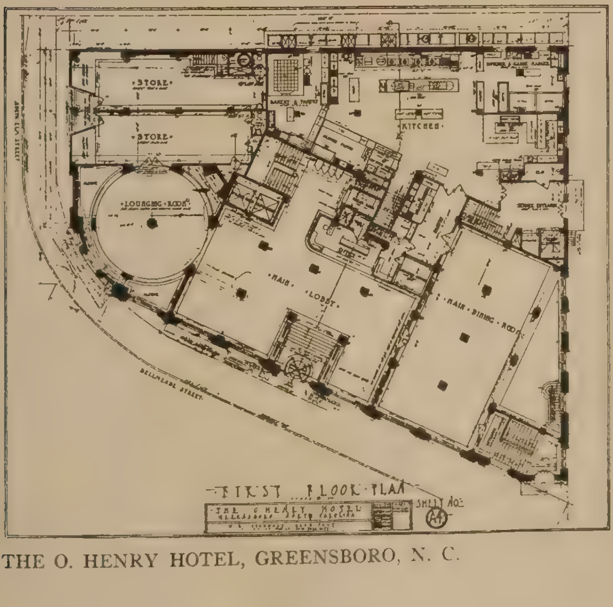
LOBBY.

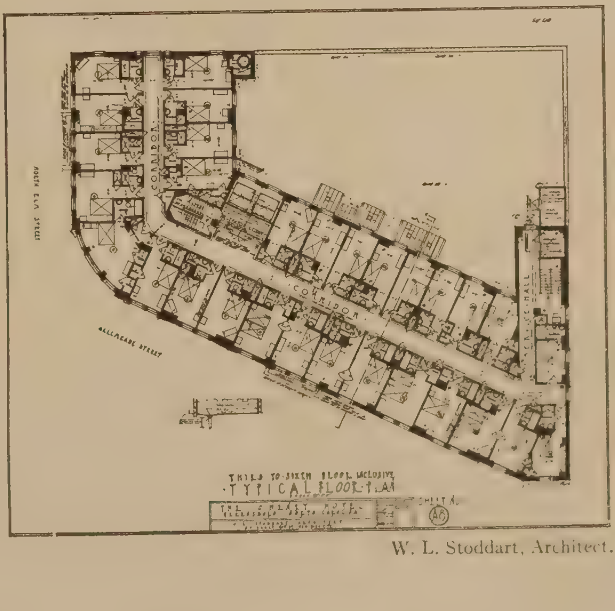
THE O. HENRY HOTEL, GREENSBORO, N. C.

W. L. Stoddart, Architect.



BALLROOM.



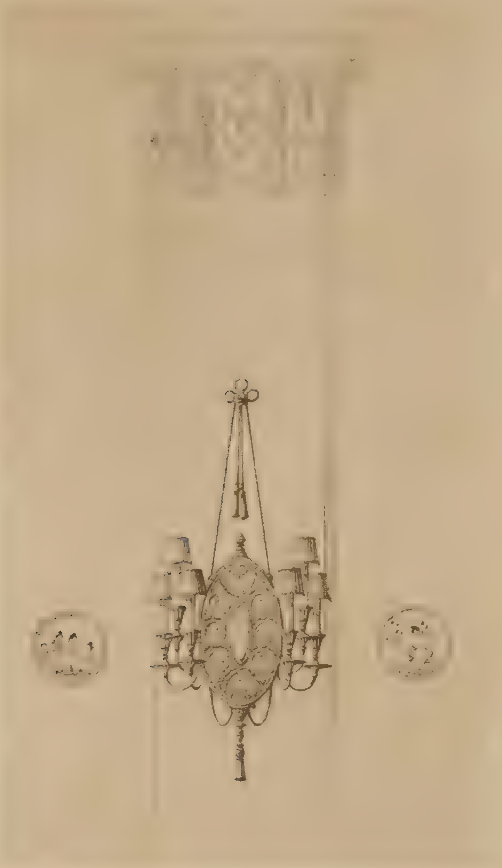


THE O. HENRY HOTEL, GREENSBORO, N. C.

W. L. Stoddart, Architect.

There are automatic door signals which will enable maids to know when rooms are occupied, and there are indirect lighting fixtures, portable lights for writing-desks, and all other conveniences in the guests' bedrooms.

A very important factor in the arrangement of the rooms is that they are all outside rooms and no interior courts, which is a factor very few hotels can boast of.



Lighting Fixture, Ladies' Lounge, Hotel Farragut, Knoxville, Tenn. The medallions contains miniature insertions in Chinese enamel illustrating some of the many incidents that help to make the life of a woman's day.

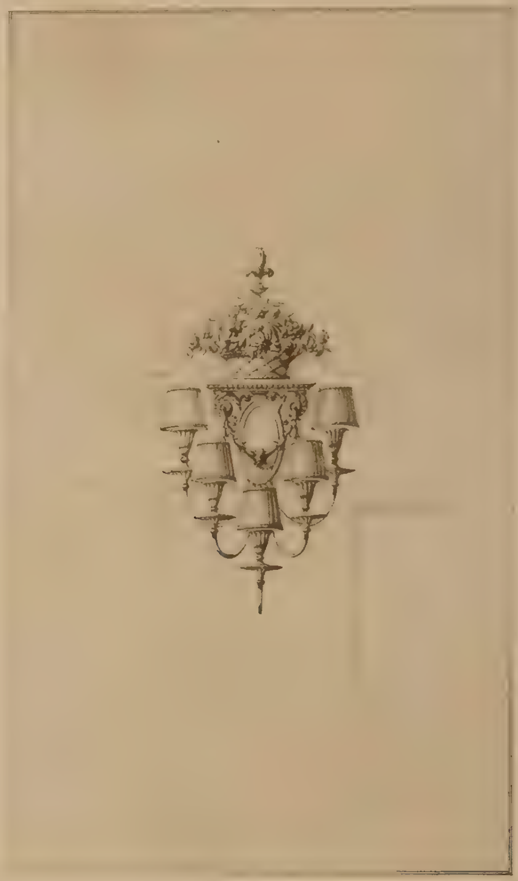
The sample rooms, which are located on the seventh floor of the building, have extra wide doors, large windows and extra lighting equipment.

In the basement under the dining-room is a room for a restaurant, with outside entrance connected with the dining-room entrance.

The spacious billiard-room and a modern tonsorial parlor, with outside entrance, comprise the basement features of The O. Henry.

The service portion of the building has been given particular and careful study in all details of arrangement and equipment, and is regarded by authoritative hotel operators to be the best that can be designed, complete in every detail for economical and rapid service in all departments.

Mr. Stoddart purposely kept the architectural details simple, especially in the interiors that were planned primarily with a view of affording effective backgrounds for rich hangings and especially designed lighting fixtures. It is Mr. Stoddart's theory that the modern hotel must be first of all convenient, well ventilated, comfortable, and that handsome furnishings in keeping with good taste are equally as essential. This idea has been carried out in two other hotels designed by Mr. Stoddart, the Farragut at Knoxville, Tenn., and the Penn Harris at Harrisburg, Pa.

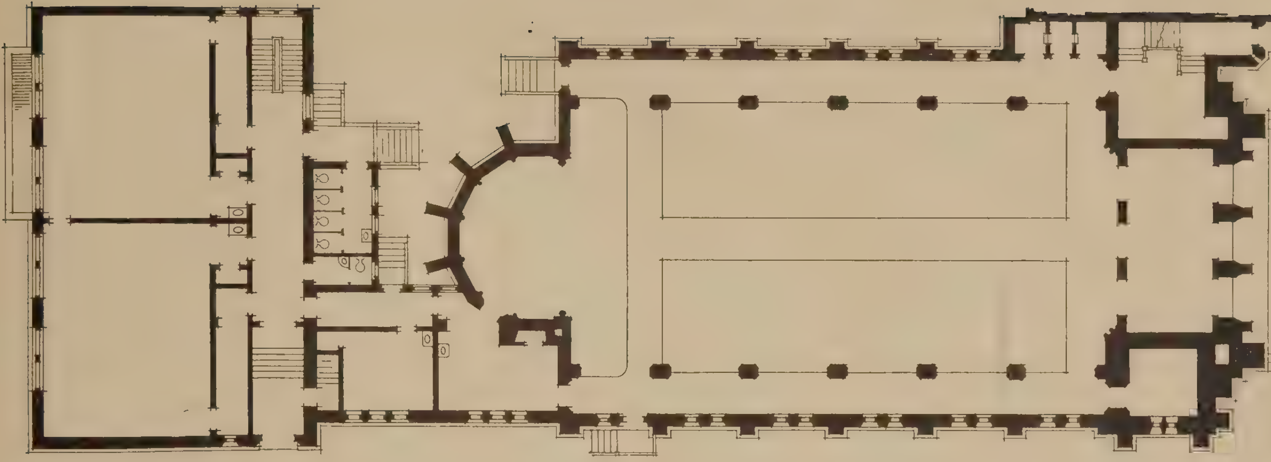


Lighting Fixture in Dining-Room, O. Henry Hotel, Greensboro, N. C. Basket of fruits and flowers produced in old gold and enamels.

As for the name "The O. Henry," there is a sort of predestined fitness. O. Henry saw life through the hotel. His stories abound in characters of the café. He knew the transient life as no other writing man of his day did. For that reason, there is a special fitness in naming this hotel after him.

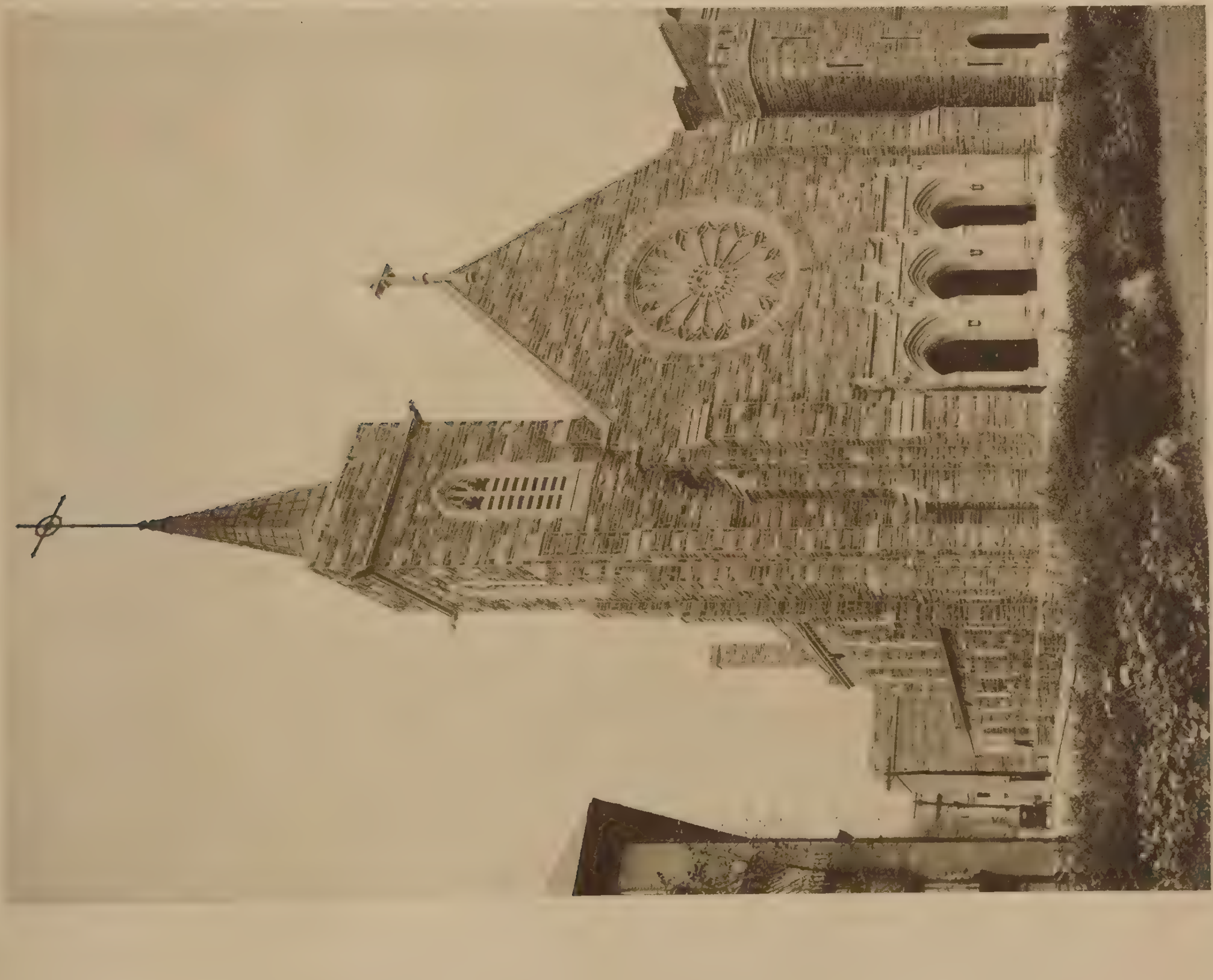
At the dedication, Doctor Smith, one of the speakers, quoted a letter from Colonel Roosevelt, in which that great reformer confessed his debt to Porter. The Rooseveltian campaigns often found their sole inspiration in the stories of popular needs which O. Henry depicted in his stories about New York. The world, Doctor Smith said, does not know how this man touched its consciousness.

In dedicating the hotel to the growth and prosperity of Greensboro, and to the honor and praise of this man of sweet and kindly spirit, Doctor Smith bade, as a good-night, that people be mindful of their heritage.



PLAN.

Paul Monaghan, Architect.



ST. LAWRENCE CHURCH, HARRISBURG, PA.

Modern Building Superintendence

By David B. Emerson

CHAPTER III

STRUCTURAL STEEL AND FLOOR ARCHES

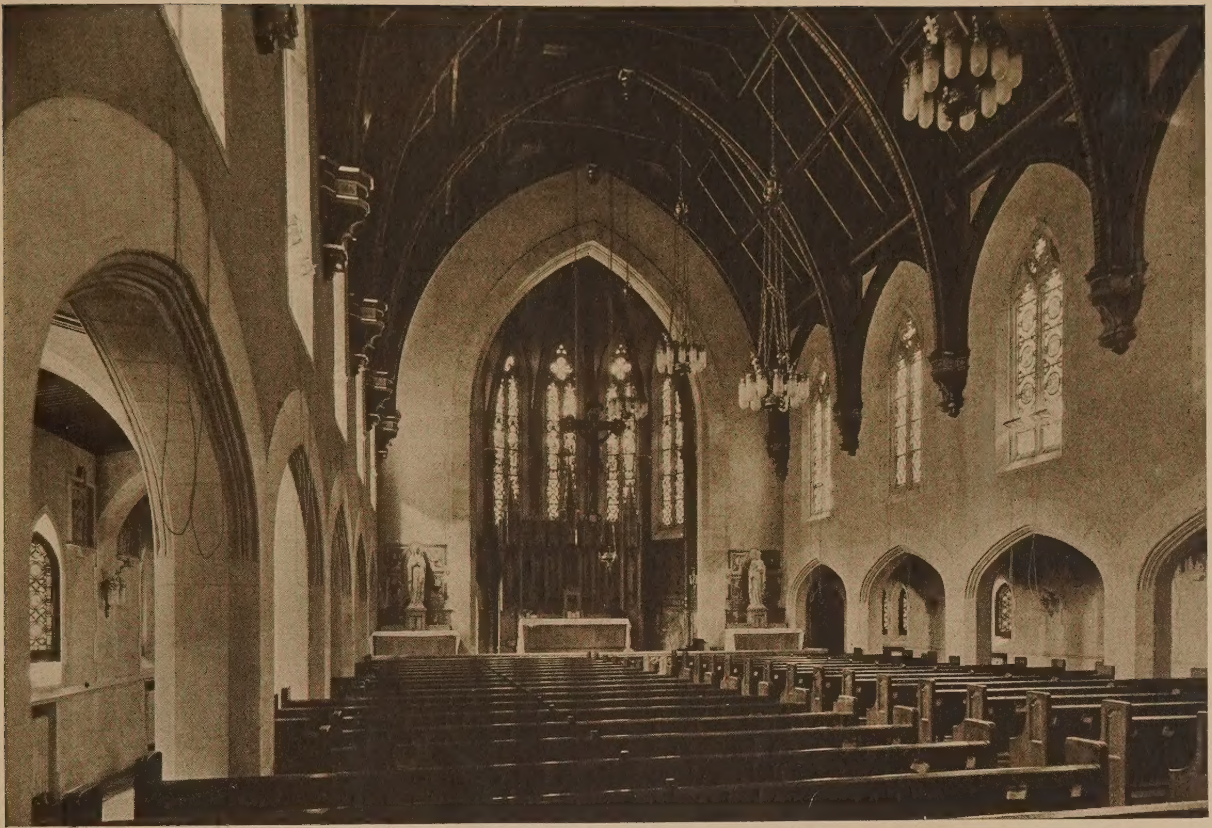
AS the structural steel works were located only a few miles from the building we were able to make occasional visits there for the purpose of inspecting the material while it was being fabricated. All beams and plates were inspected to see that the punching was done according to the drawings, and that all holes were clean-cut and without torn or ragged edges. All shop rivets were inspected. Before going to the shop a one-pound machinist's hammer was purchased at a near-by hardware shop. Tapping the rivet heads with this hammer told whether they were tight or not, and whether they completely filled the holes. A few loose rivets were found and ordered to be cut out and new rivets put in their places. All built up members were inspected to see that the abutting parts were painted before assembling. Strict orders were given that all steel should be thoroughly cleaned before painting, all rust and mill scale was ordered removed before applying the paint, where the rust had eaten into the surface of the steel it was ordered to be cleaned with wire brushes. The shop coat of paint was specified to be put on with hand brushes, and well brushed in. No long-handled brushes were to be used. The shop coat was called for in the specifications to be of red lead and linseed oil. Paint to be made up by mixing the pure red lead in a dry state, and the pure linseed oil in a revolving churn, using twenty-two pounds of lead to one gallon of oil, and mixing immediately before using. Not over one hundred and ten pounds of lead was allowed to be mixed at one time, and that had to be entirely used before another batch was allowed to be mixed. The first of the steel to arrive on the job was the beams for the grillage under the columns. The grillage beams were carefully spaced according to the details, and they were held together by means of long rods and gas-pipe separators; the grouting and filling with concrete was done as described in the previous chapter; the second tier of beams in the grillage was then set.

Particular care had to be taken to see that the position of the beams was exactly as they were figured on the plans, as the columns should set exactly in the centre of the grillage. The upper tier of beams was bolted together with rods and separators and filled between with concrete, as was the lower tier. Before setting, the shop coat of paint on the beams was touched up in all places where it had been marred in handling, and then the beams were given one coat of paint which had a bituminous base to resist the action of the alkalis in the cement, and also as a proof against any dampness which might come through the concrete. All bolts and separators were painted one coat. The columns were to set on solid slabs of rolled steel, which were to distribute the loads over the grillage; in this case they were thirty-two inches square and five inches thick, with both faces planed. The column bases sat upon these slabs and were bolted to them. We were very careful to see that every slab was well painted before setting. After the grillage had been set, the engineer was called to take the levels, and test all measurements to see that all was correct before starting the actual work of erection, for at this time errors can easily be corrected, which will entail great expense if not detected until after part of the steel has been erected. All being found to be correct, the erection of the steel was commenced, columns were set, and girders were put in place ready for rivetting. All work was drawn up close by means of erection bolts, so that the metal from the rivets would not flow between the plates.

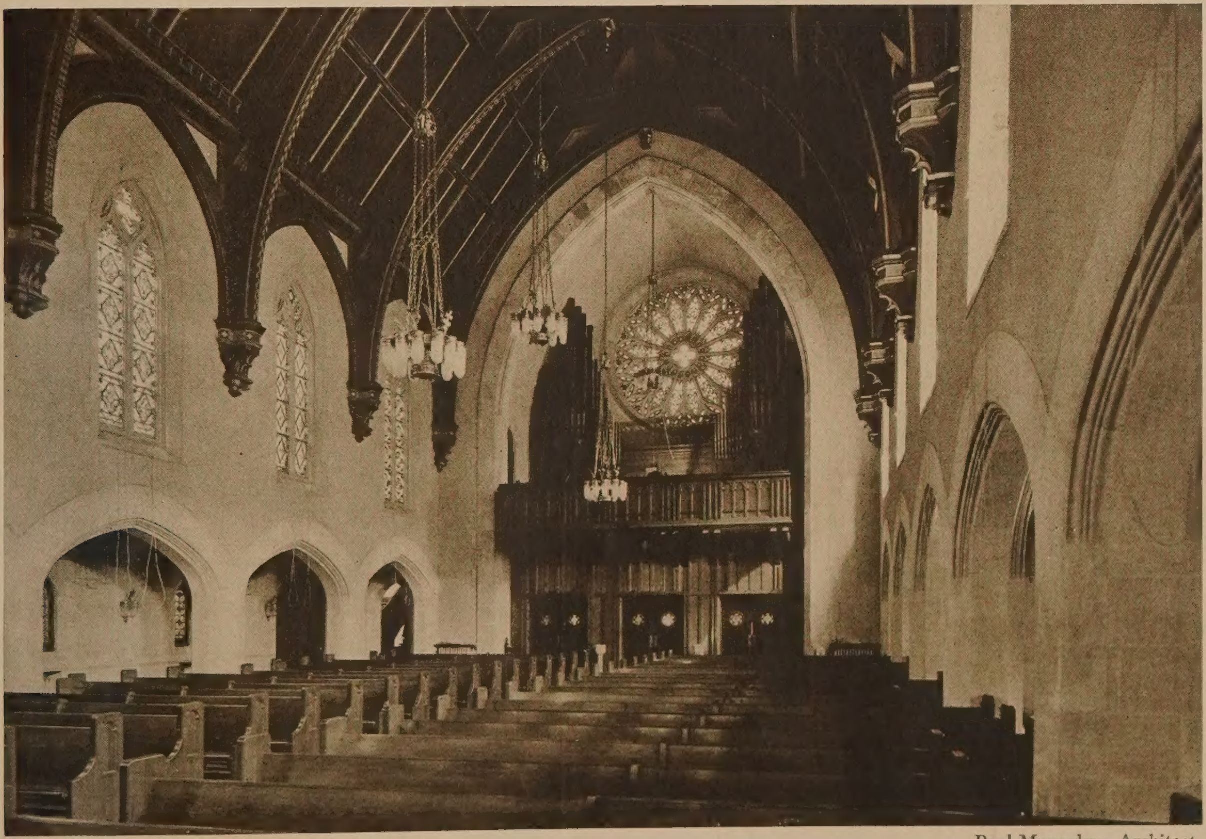
Holes were brought in line and matched by the use of drift pins, but particular care was taken to see that the metal was not injured in the driving of the pins. All field riveting was done by means of a pneumatic riveter. Rivets were inspected to see that they were long enough to fill the holes and to form a perfect head. All column splice plates were rivetted, and all girders were connected to columns by means of rivets. Connections of floor beams to girders were made by bolting. Columns were plumbed as each section was set. When the third tier of beams had been set the contractor was ordered to plank over the entire first tier of beams, and each alternate tier was planked over as the work progressed. This was done as a protection to the workmen who were working underneath, as a hot rivet or a bolt falling any distance from above is liable to cause serious and possibly fatal injuries to the men below. As the steel was set the shop coat of paint was touched up where it had been marred in handling, and all rivet heads were painted one coat to match the shop coat of the steel. All bolts were dipped in paint before putting them in place. The steel was given a field coat of genuine graphite paint.

All painting was specified to be done with hand brushes and carefully brushed in. As erectors generally try to slight this part of the work, we were obliged to follow them up pretty closely and insist that the work be done according to specifications, and when they learned that we really meant what we said, the work went along smoothly and well. The bottom flanges of all beams and girders, and the flanges of all free standing columns, were fitted with metal caging to hold the haunching and the column casing. The caging was made of galvanized steel wire, and came to the job collapsed, and was opened out accordionwise and adjusted to the flanges of beams and columns. The columns were provided with special wet stiffeners to go over the wet openings, making a complete cage around the column. As the erection of the steel progressed the ornamental iron contractor commenced setting the strings and risers for the staircase, and iron work for the elevator enclosures, and the plumber followed close on the heels of the erectors, installing the soil and waste lines and the leaders, so that there would be no delays in the work.

The strings and risers of the main stairs were of cast-iron, moulded and ornamented. As the castings arrived at the building they were looked over to see that they were true to line, with no breaks nor shoulders, that they had no blow-holes, nor sand-holes, and that all gates and fins had been thoroughly ground off. All castings were wire-brushed to remove all sand. All stair work was specified to be put together with countersunk screws, concealed wherever pos-



INTERIOR, LOOKING TOWARD SANCTUARY.



INTERIOR, LOOKING TOWARD GALLERY.

Paul Monaghan, Architect.

ST. LAWRENCE CHURCH, HARRISBURG, PA.

sible. The stair strings were securely bolted to the steel frame, and the risers were bolted to the strings. The stairs were provided with under treads of number ten gauge sheet iron, screwed to the risers; this was done in case of fire calcining the marble treads, there would be no danger of a person who stepped on the tread breaking through and being injured. When a few tiers of steel had been set, the forms were put in place, and the reinforcing for the floor slabs was installed. The forms were constructed as described in the preceding chapter, and hung from the floor beams and girders. The slab reinforcing was in the form of a continuous steel wire mesh, which was laid the full length of the building and securely fastened to the beams at the walls, and run over the upper flanges of the floor beams.

The edges of the fabric were ordered to be lapped and well wired together, which made a complete sheet of reinforcing over the entire floor. As soon as reinforcing was in place the pouring of the floor slabs was commenced. Concrete was as described in the previous chapter. It was sent up to each floor by means of a specially constructed hoist, equipped with a dumping bucket, and spread on the forms. All concrete was placed the full depth at one operation. It was found necessary in some cases to stop placing concrete before the entire slab was completed, in which case we instructed the foreman to make the joints in the centre of the panels by means of vertical bulkheads. These bulkheads were provided with triangular strips which formed a two-inch by two-inch key in the centre of the slab. The strip set on top of the steel, and the space between was caulked with a one to two cement mortar. Bulkheads were not allowed to be removed until the concrete had set hard. The offices throughout the building were to have cement-finished floors. These were to be laid as an integral part of the floor slab. The contractor was instructed to screed the wet concrete up with a straight edge, bringing it level with the grade of the finished floor. While the concrete was still in a liquid state, the cement finishers started floating this down with a one to one and a half mixture of Portland cement and sand, applied dry and worked into the top of the slab. The finishers then hand floated into this top a one to one mixture of Portland cement, and a metallic hardener, working out all the air bubbles and bringing the water up to the surface. The surface was finished by giving it a hard fanning or burnishing, polishing it thoroughly and completely eliminating all trowel marks. Strict orders were given that laborers or mechanics should not walk over the fresh concrete, and any who persisted in doing it were ordered to be discharged. The finished floors were covered with one inch of sawdust within twenty-four hours after their completion, and this sawdust was wet down twenty-four hours afterward, and the floors were kept covered, until the completion of the building. On returning to the building after an absence of a day at some of the shops inspecting material, we found that the foreman was piling quantities of building material on the floor slabs, which had just about set and that were still quite fresh. This was ordered stopped and the materials removed as rapidly as possible. This practice cannot be too heartily condemned, as the wet concrete is always considerably heavier than when dried out, and the adding of a superimposed load considerably greater than the assumed live load, and very often concentrated on one or two panels, has in some cases caused a collapse of the entire structure.

Before the floor slabs were poured and after the reinforcing had been placed, the electrician was notified to install all conduit and outlet boxes which were to be buried in the concrete. The installation of conduit, etc., will be treated fully in a later chapter. The steel frame being erected and the pouring of the floor slabs well advanced, the laying up of the brick work and the setting of the cut stone and the terra-cotta was now started, and will be the subject of the coming chapter.

(*To be continued.*)

Practicality Must Supplement Idealism

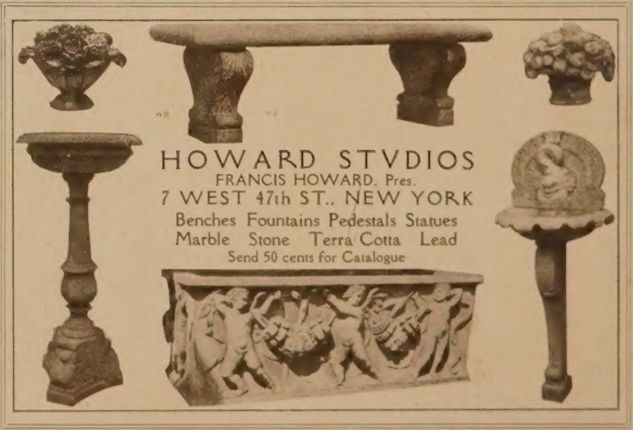
"There is no dearth of political idealism in the United States, nor lack of an able spokesman for our national morality. Only posterity, with the advantage of perspective, can properly appraise them; certainly, I shall not attempt to do so. But there has never been an occasion when practical, constructive, business leadership was at a higher premium in this country than at the present.

"If we are to keep pace with the accelerated movement of the new period, we cannot permit lilliputian ideas to bind our industrial Gulliver. And that is what those who seek to return to pre-war conditions and restraints are advocating.

"We may expound our national idealism to the world with all the zeal of modern crusaders, but unless we supplement it with practical efforts, based upon the fundamental principle of helping other peoples to help themselves, our idealism will utterly fail of its purpose. And I contend that the best way to make such practical humanitarianism possible is to free business of its present and pre-war obstacles, for, if the war has taught us anything about economics, we have awakened to a realization that all nations are interdependent, that the prosperity of each is contingent upon the prosperity of the others, that productivity does not enrich one people or class alone but all humanity as well. If this country, therefore, is permitted to utilize its industrial resources, strength, and individual initiative in a measure commensurate with the demands of the hour, we will put at the disposal of the world one of the most efficacious of stabilizing forces."

Stop Knocking

IF we as a profession do not have confidence in ourselves, how can we expect confidence in others?



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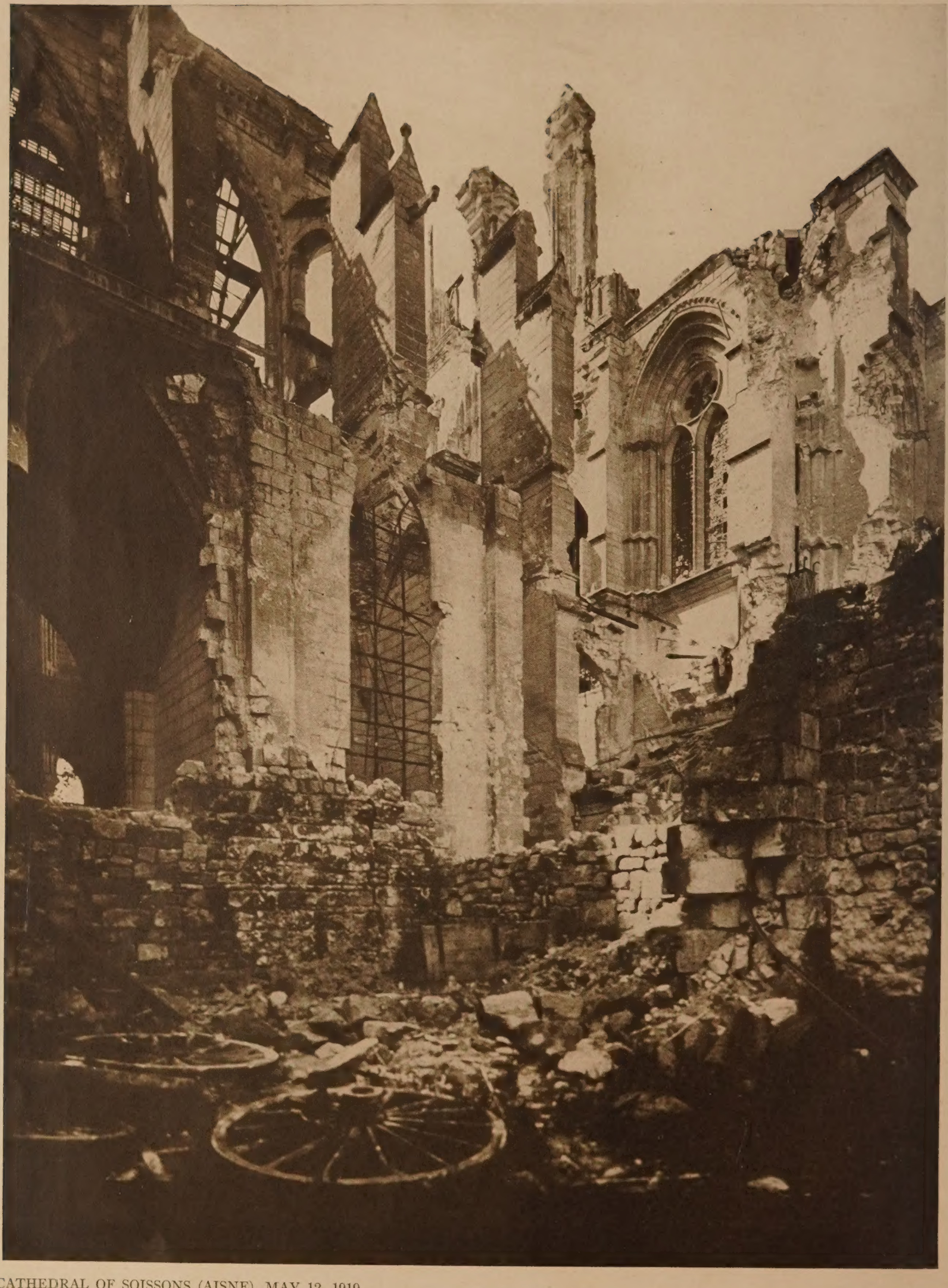

CATHEDRAL OF SOISSONS (AISNE), MAY 12, 1919.